**INTRODUCTION:**
Adam Tech MTJ series Modular Jacks are a complete line of PCB and wire leaded jacks which are UL and CSA approved and meet all required FCC rules and regulations. Adam Tech offers a multitude of sizes (4P2C thru 10P10C) with styles including single, ganged and stacked versions with options of ferrite or magnetic filtering and or metal shielding. Jacks with integral LED's and combination hybrids such as MTJ/USB jacks are also available. These jacks are available in thru-hole or SMT mounting.

**FEATURES:**
UL 1863 recognized versions
FCC compliant to No. 47 CFR part 68
Magnetic and Ferrite filtered types
4,6,8 and 10 positions available
Single, stacked or ganged
Hi-Temp and LED options
Unshielded or Metal Shielded
Thru-Hole or SMT mounting
Cat. 5 & 5e ANSI/TIA/EIA 568.2

**MATING PLUGS:**
Adam Tech modular plugs and all industry standard telephone plugs.

**SPECIFICATIONS:**

**Material:**
Standard Insulator: PBT, or ABS, rated UL94V-0
Optional Hi-Temp Insulator: Nylon 6T rated UL94V-0
Insulator Colors: Black or medium gray
Contacts: Phosphor Bronze
Shield: Phosphor Bronze, Nickel plated

**Contact Plating:**
Flat contacts: Gold over Nickel underplate on contact area, Tin over Copper underplate on solder tails.
Round contacts: Gold over Nickel underplate overall

**Electrical:**
Operating voltage: 150V AC max.
Current rating: 1.5 Amps max.
Contact resistance: 20 mΩ max. initial
Insulation resistance: 500 MΩ min.
Dielectric withstanding voltage: 1000V AC for 1 minute

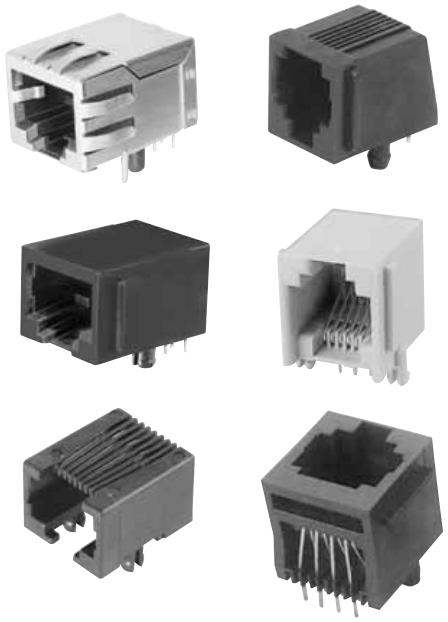
**Mechanical:**
Insertion force: 4 contacts: 17.6N
6 contacts: 20.6N
8 contacts: 22.5N
10 contacts: 24.5N
Durability: 500 Cycles

**Temperature Rating:**
Operating temperature: -40°C to +85°C
Soldering process temperature:
Standard insulator: 235°C
Hi-Temp insulator: 260C

**PACKAGING:**
Anti-ESD plastic trays

**SAFETY AGENCY APPROVALS:**
UL Recognized & CSA Certified,
File no. E224049

RoHS COMPLIANT
HI-TEMP INSULATOR AVAILABLE



## ORDERING INFORMATION

| MTJ | 6 | 4 | 0 | 2 | 1 |
|---|---|---|---|---|---|

**SERIES INDICATOR**
**MTJ** = Modular telephone jack

**HOUSING PLUG SIZE**
4, 6, 8 or 10

**NO. OF CONTACT POSITIONS FILLED**
2, 4, 6, 8 or 10

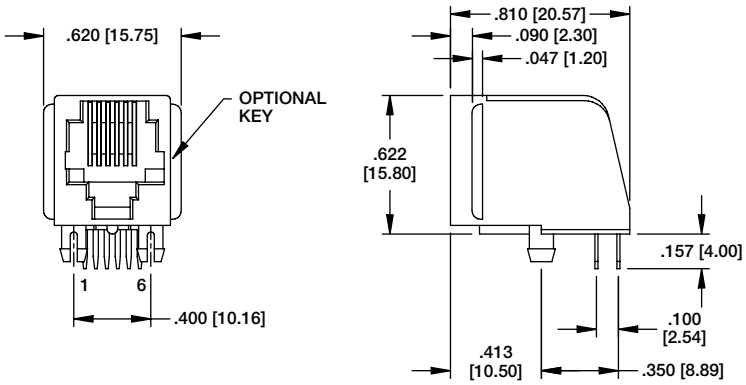
**HOUSING TYPE**
0, 1, 2, 2B, 2C, 3, 5, 7, 9, A, E, F, G, H, K, M, T, V, W, WA, WB, Y, Q

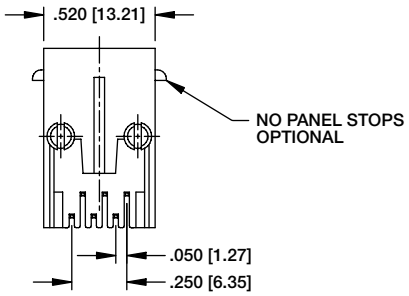
**PLATING**
**X** = Gold Flash over Nickel underplate
Consult factory for additional plating options

**BODY COLOR**
**1** = Black
**2** = Gray

**OPTIONS:**
Add designator(s) to end of part number
**S** = Face shielded jack (Body type 0 only)
**FSX** = Full metal shield (Use FSA, FSB, FSD, FSE)
**SMT** = Surface mount tails, housings 0, 5, 9, G & W with Hi-Temp insulator
**N** = No panel stops (Types: 1, 0, 2, 3, D)
**K** = Keyed telephone jack
**HT** = Hi-Temp insulator for Hi-Temp soldering processes up to 260C *(Add this option for thru-hole products only. All SMT products are manufactured with Hi-Temp insulators)*
**PG** = Panel ground tabs
**KT** = Kapton Tape pickup when applicable

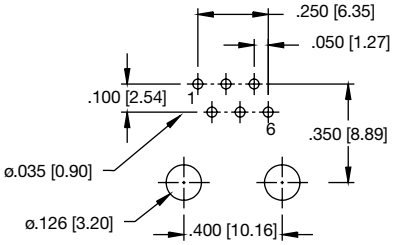
**TYPE 1**
**6P6C**
**6P4C**



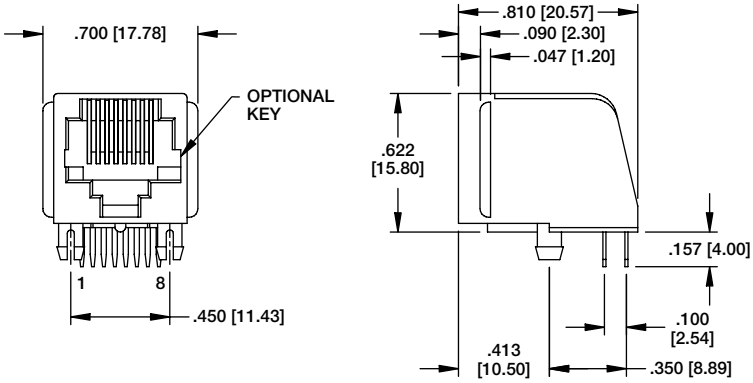
**MTJ-661X1**

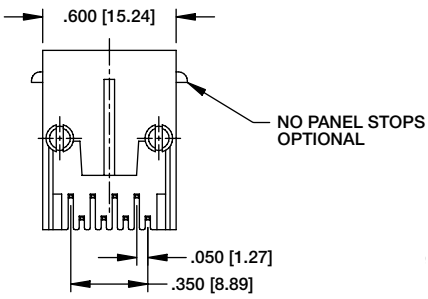
**Ordering Information pg. 9**




**Recommended PCB Layout**

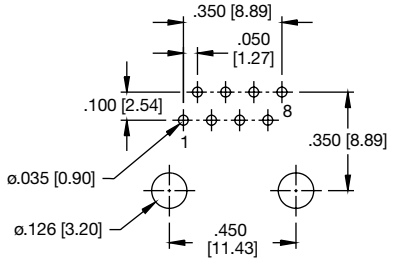
**TYPE 1**
**8P8C**



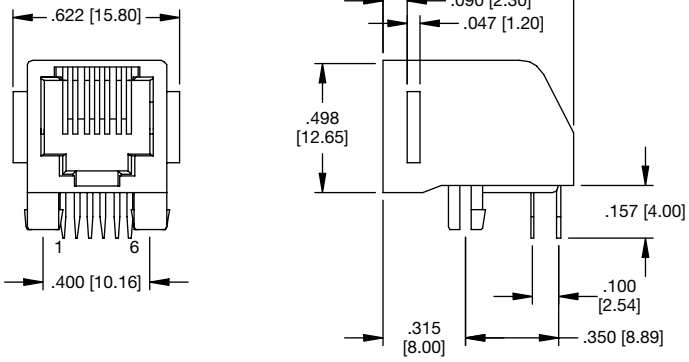
**MTJ-881X1**

**Ordering Information pg. 9**



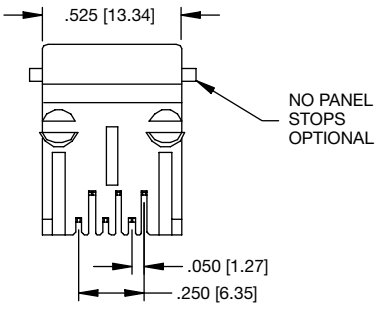

**Recommended PCB Layout**

## TYPE 0
6P6C
6P4C

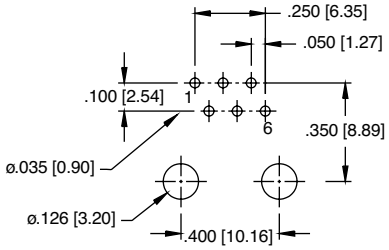


MTJ-660X1

Ordering Information pg. 9

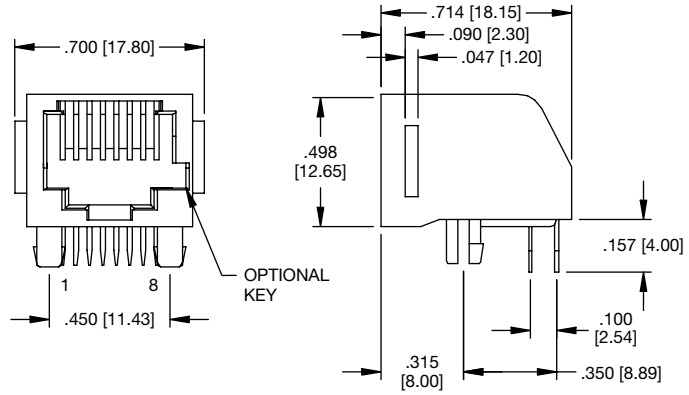


Face Shield Option



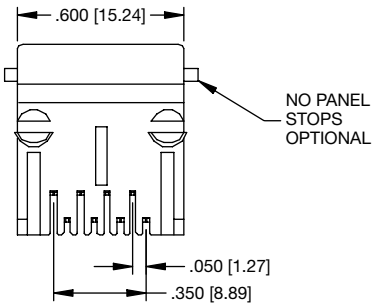

Recommended PCB Layout

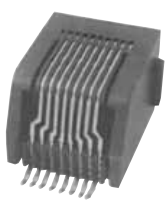
## TYPE 0
8P8C



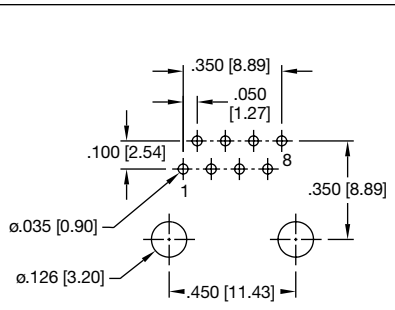
MTJ-880X1

Ordering Information pg. 9



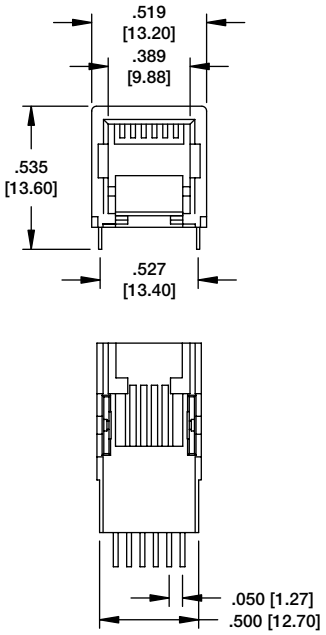
SMT Option

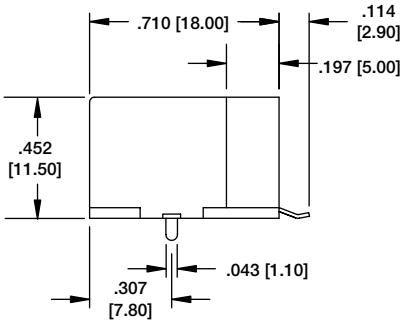



Recommended PCB Layout

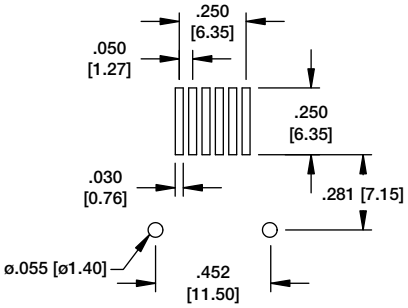
Ordering Information pg. 9

**TYPE Y**
**6P6C**
**6P4C**



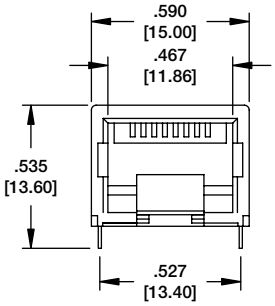



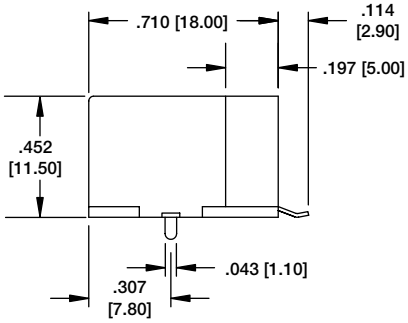
**MTJ-66YX1**



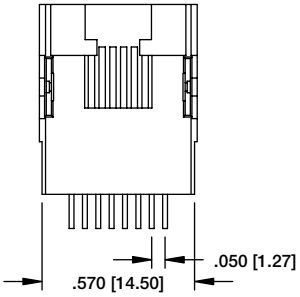

Recommended PCB Layout

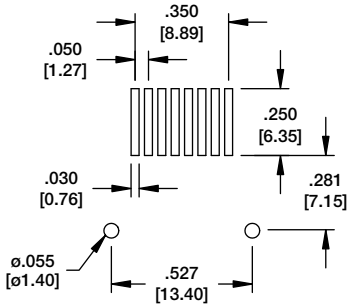
**TYPE Y**
**8P8C**



**MTJ-88YX1**

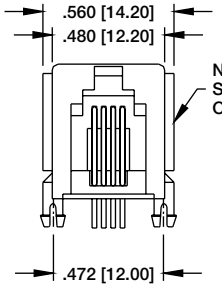


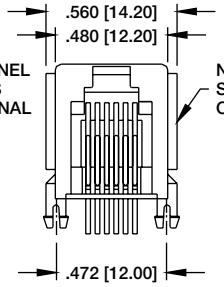



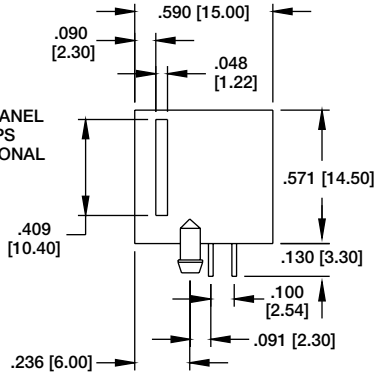

Recommended PCB Layout

Ordering Information pg. 9

## TYPE 2
4P4C
6P6C
6P4C



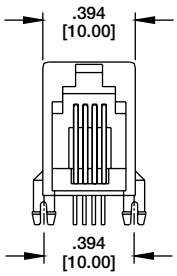



MTJ-662X2

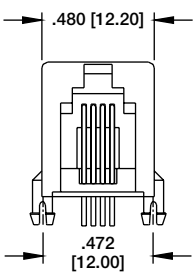
MTJ-442X2

## TYPE 2B & 2C
4P4C
6P6C
6P4C
8P8C

TYPE 2B 4 POS

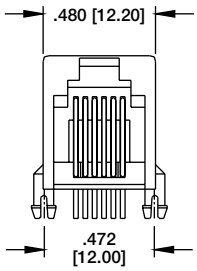



TYPE 2C 4 POS

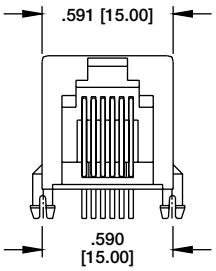


MTJ-442BX2

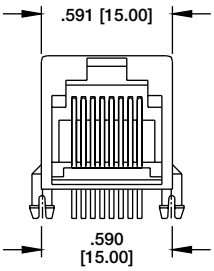
MTJ-642BX2



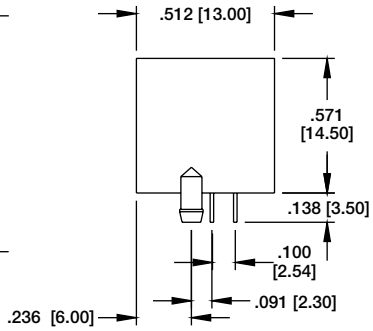

TYPE 2B 6 POS




TYPE 2C 6 POS

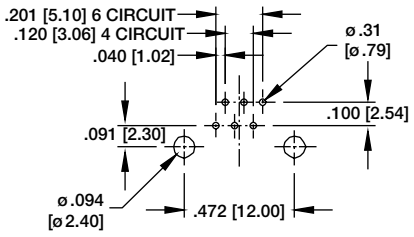



TYPE 2B 8 POS

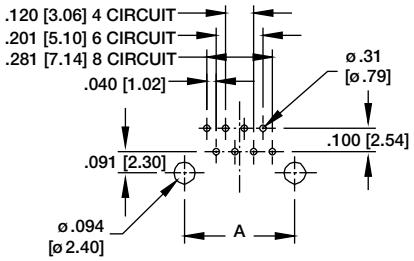


MTJ-882BX1

## TYPE 2




## TYPE 2B & 2C



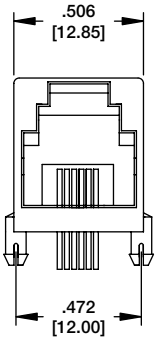

Recommended PCB Layout

| DIM. "A" | |
|---|---|
| TYPE 2B 4P4C | .394 [10.00] |
| TYPE 2C 4P4C | .472 [12.00] |
| TYPE 2B 6P6C | .472 [12.00] |
| TYPE 2C 6P6C | .591 [15.00] |
| TYPE 2B 8P8C | .590 [15.00] |

Ordering Information pg. 9

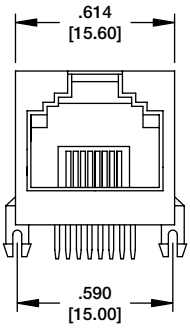
## TYPE 2B
SHIELDED
6P6C
6P4C
8P8C

**MTJ-662BX1-FS**

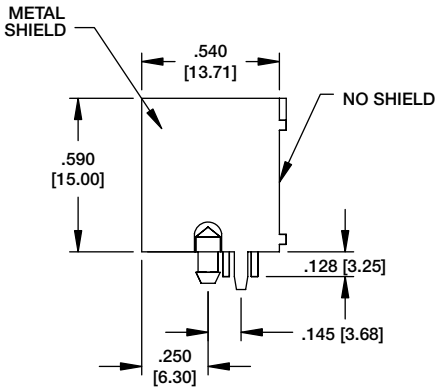



6 POS
2B SHIELDED

**MTJ-882BX1-FS**

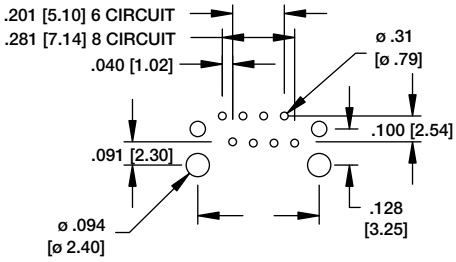



8 POS
2B SHIELDED



**MTJ-662BX1-FS**

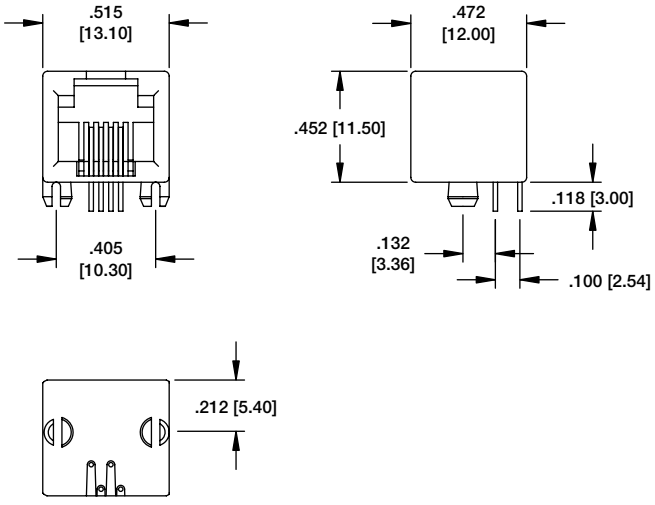
**MTJ-882BX1-FS**



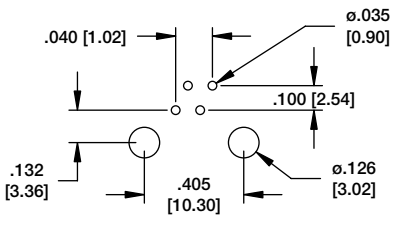

Recommended PCB Layout

| DIM. "A" | |
|---|---|
| TYPE 2B 6P6C | .472 [12.00] |
| TYPE 2B 8P8C | .590 [15.00] |

## TYPE Q
COMPACT JACK
4P4C



**MTJ-44QX1**




Recommended PCB Layout

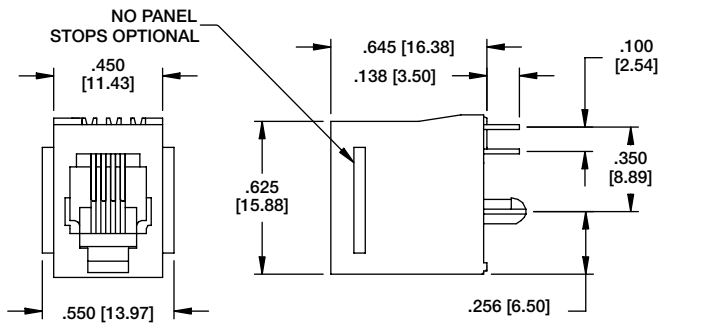
# MODULAR JACKS

## .645" HEIGHT, TOP ENTRY, OPEN BODY - TYPE 3

MTJ SERIES

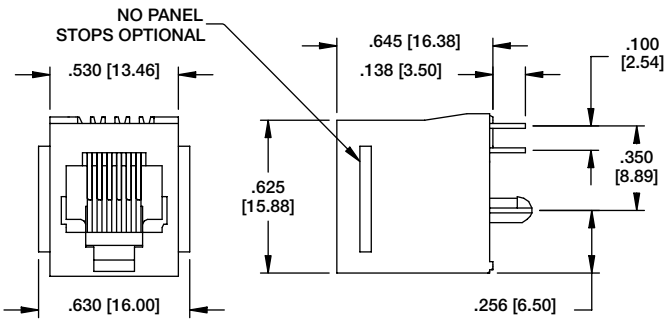
Ordering Information pg. 9

**TYPE 3**
**4P4C**



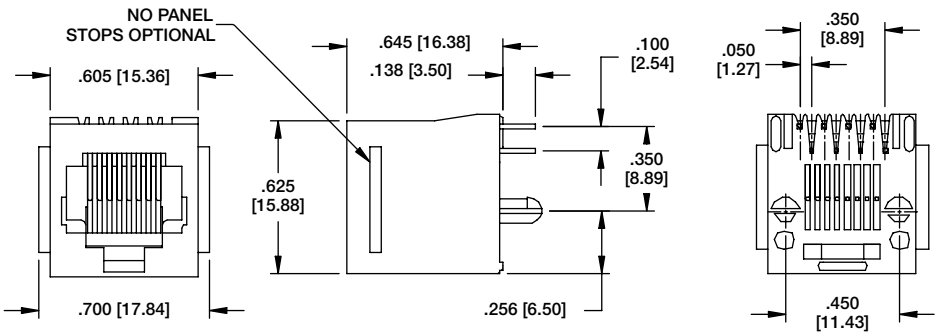
MTJ-443X1

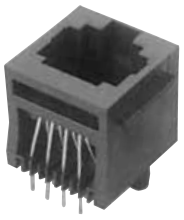
**TYPE 3**
**6P4C**



MTJ-663X1

**TYPE 3**
**8P8C**

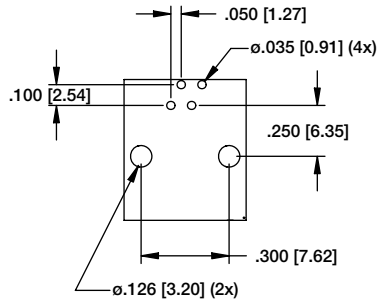


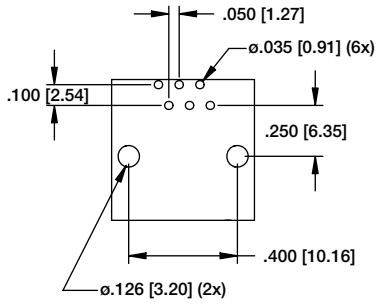
MTJ-883X1

### Recommended PCB Layout

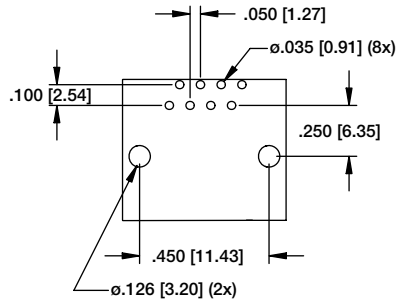
**4p4c**




**6p4c**
**6p6c**

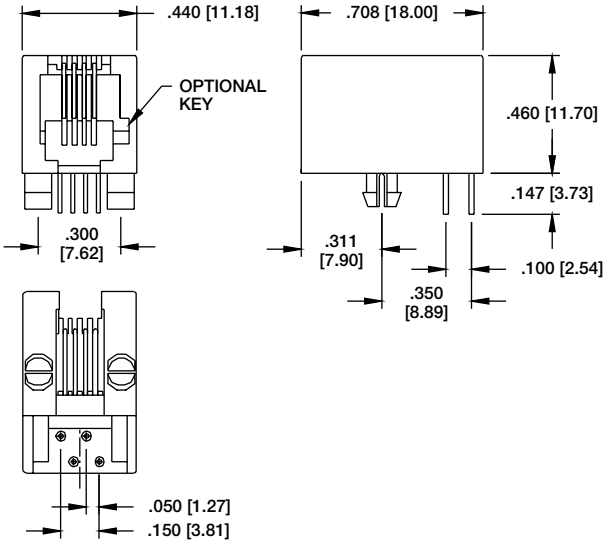


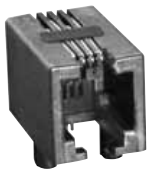

**8p8c**



Ordering Information pg. 9

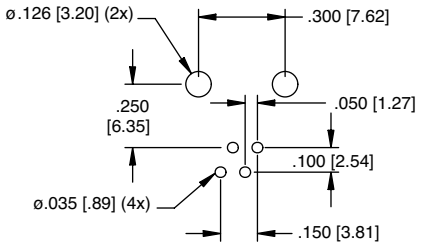
## TYPE 5
4P4C



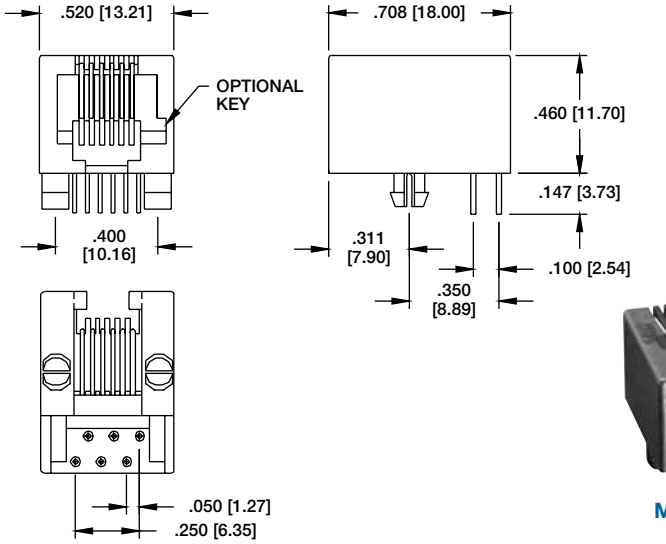



MTJ-445X1

### Recommended PCB Layout

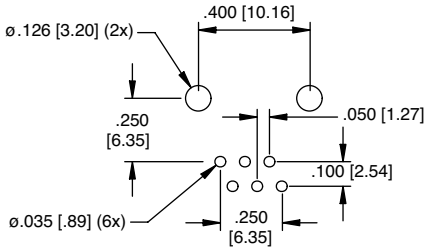



## TYPE 5
6P4C
6P6C

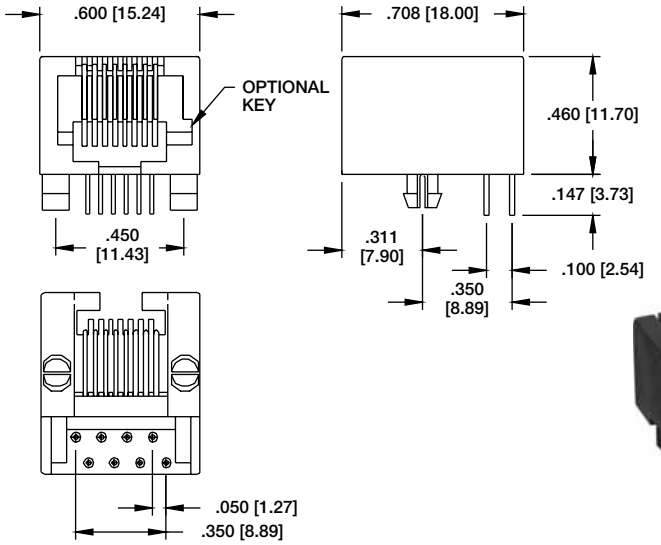


MTJ-665X1

### Recommended PCB Layout



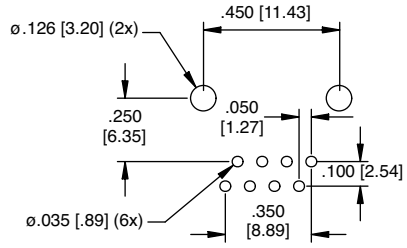

## TYPE 5
8P8C



MTJ-885X1

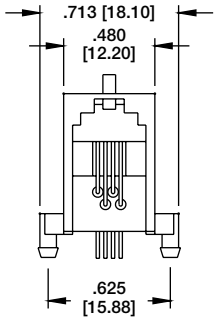
### MT Option

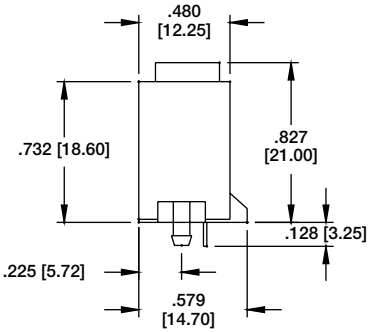
### Recommended PCB Layout



Ordering Information pg. 9

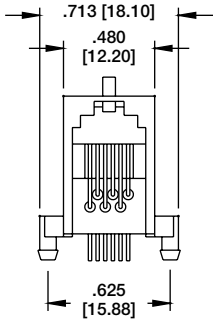
**TYPE 7**
**4P4C**

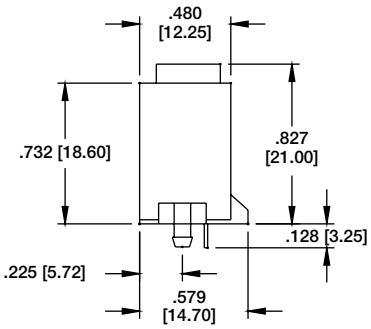


MTJ-447X1

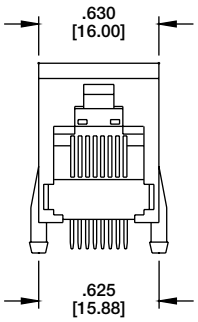
**TYPE 7**
**6P4C**
**6P6C**

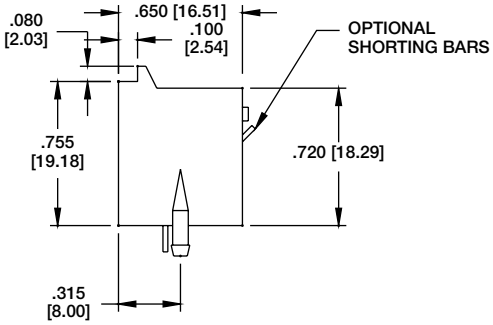


MTJ-647X1

**TYPE 7**
**8P8C**

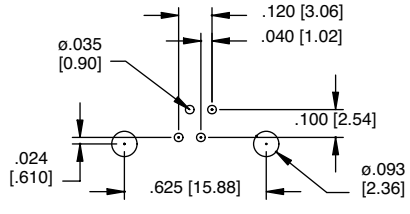


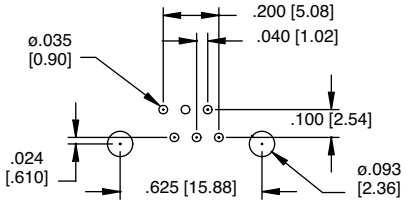
MTJ-887X1

Recommended PCB Layout

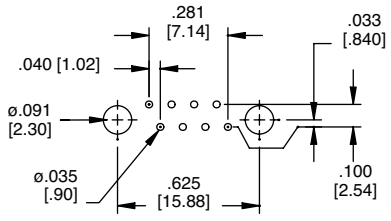
**4p4c**




**6p4c**
**6p6c**

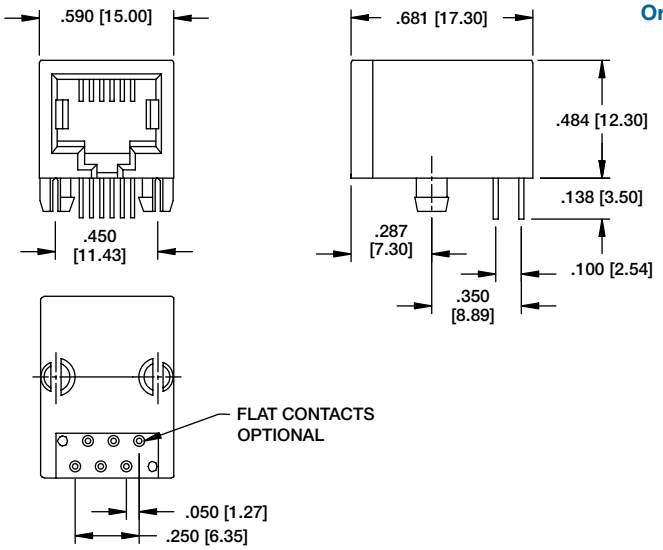



**8p8c**

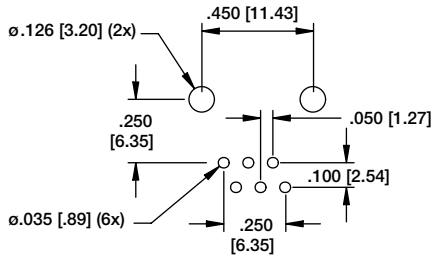


Ordering Information pg. 9

## TYPE 9
### 6P4C
### 6P6C

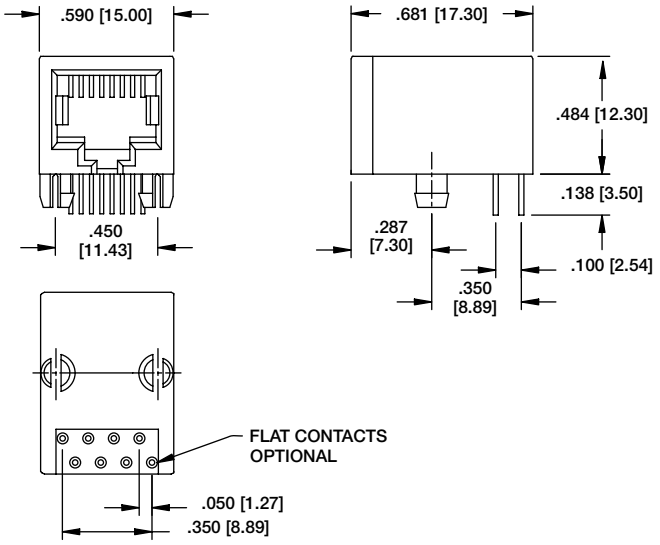


MTJ-669X1

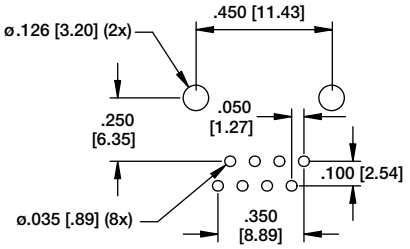



Recommended PCB Layout

## TYPE 9
### 8P8C

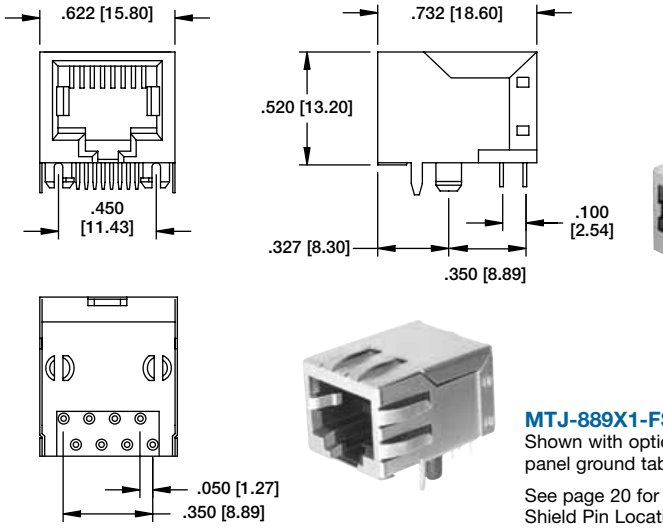


MTJ-889X1




Recommended PCB Layout

## TYPE 9
### 8P8C
### SHIELDED



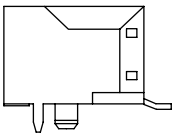
MTJ-889X1-FSE

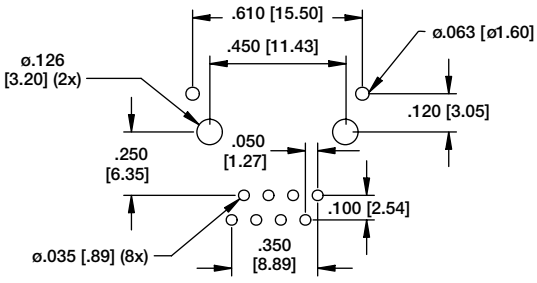


**MTJ-889X1-FSE-PG**
Shown with optional panel ground tabs

See page 20 for other Shield Pin Location Options

### SMT Option

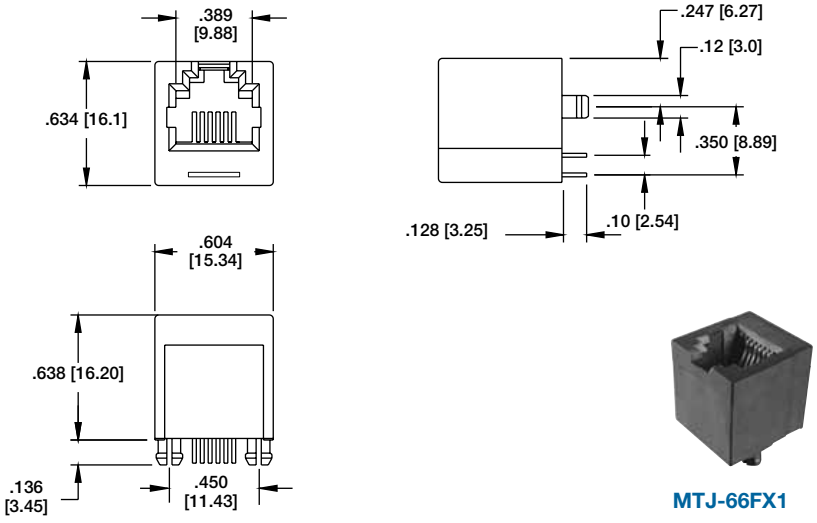




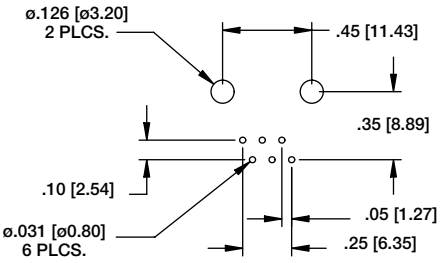

Recommended PCB Layout

Ordering Information pg. 9

## TYPE F
6P6C

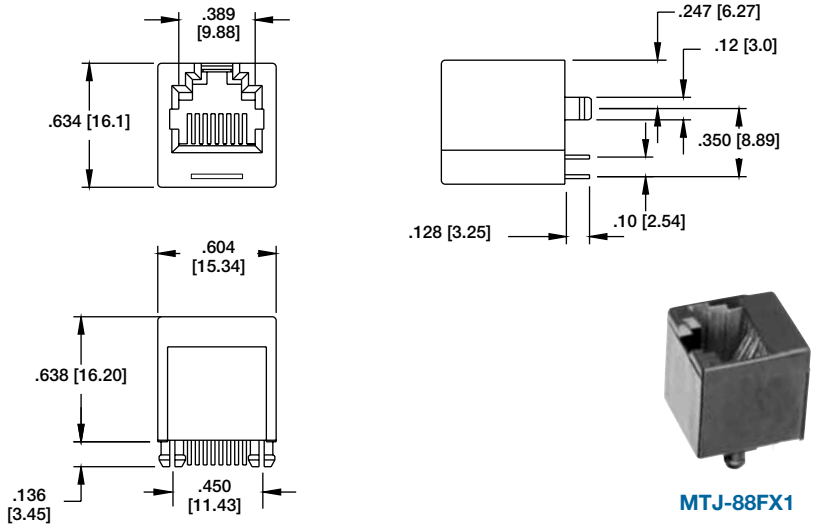



MTJ-66FX1

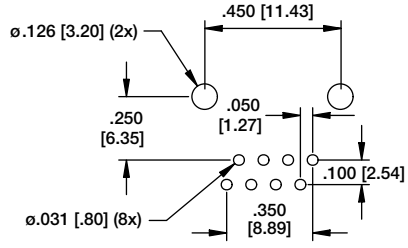



Recommended PCB Layout

## TYPE F
8P8C

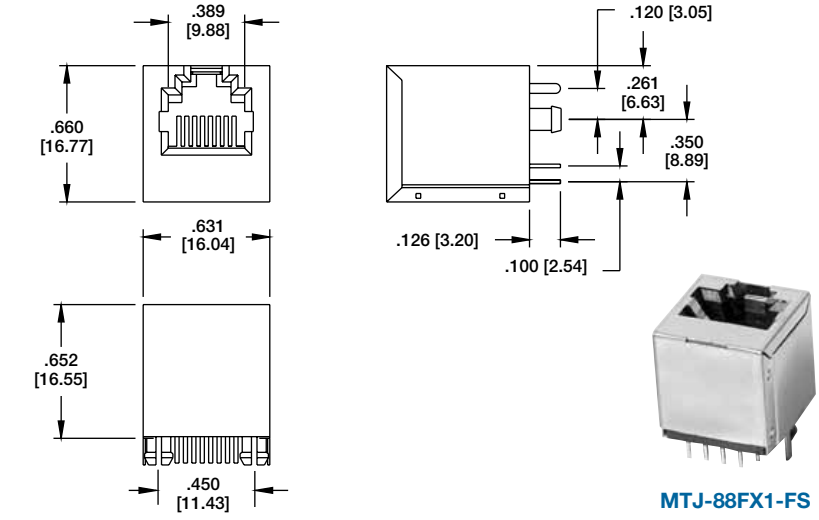



MTJ-88FX1

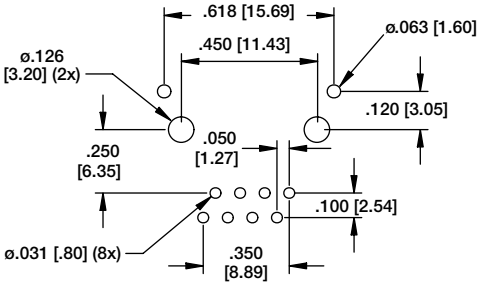



Recommended PCB Layout

## TYPE F
SHIELDED
8P8C




MTJ-88FX1-FS




Recommended PCB Layout

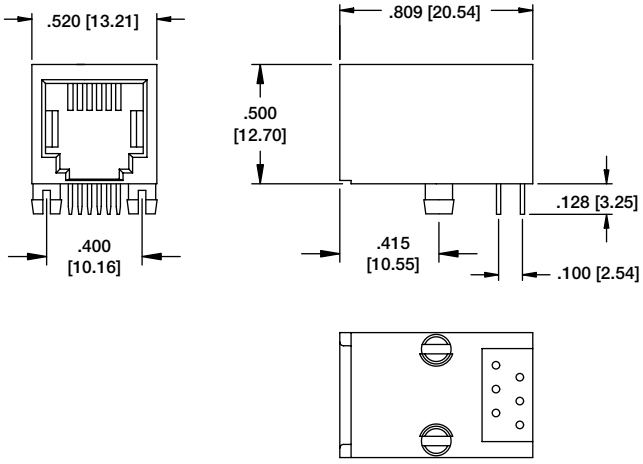
# MODULAR JACKS

## .500" HEIGHT, SIDE ENTRY - TYPE G

MTJ SERIES

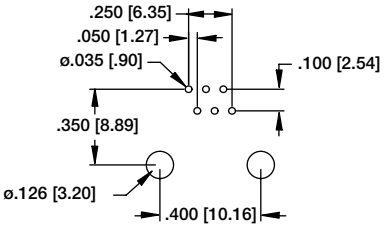
Ordering Information pg. 9

### TYPE G
6P6C

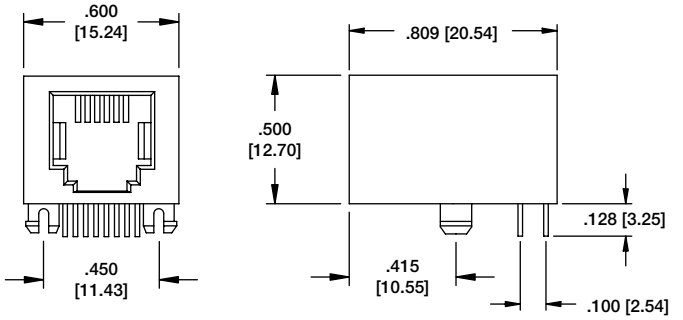


MTJ-64GX1

#### Recommended PCB Layout

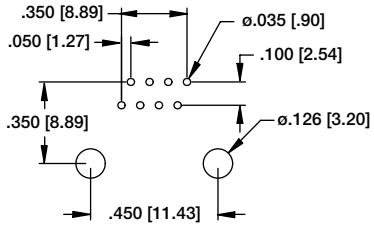


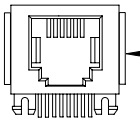

### TYPE G
8P8C



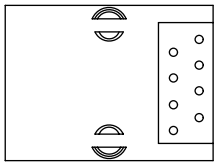
MTJ-88GX1

#### Recommended PCB Layout

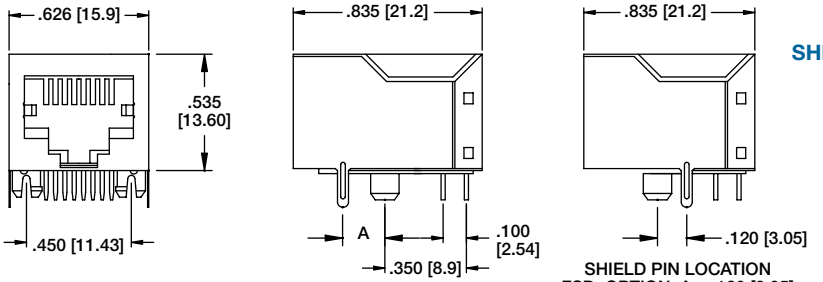



Available with optional panel stops
Add -PS to end of part No.

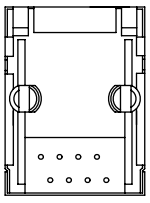


### TYPE G
SHIELDED
8P8C




SHIELD PIN LOCATION
FSD OPTION: A = .120 [3.05]

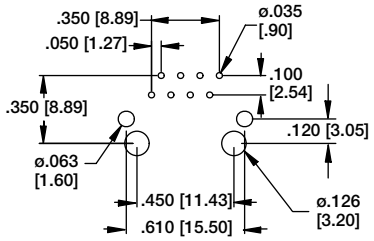
SHIELD PIN LOCATION OPTIONS
FSA OPTION: A = .170 [4.32]
FSB OPTION: A = .144 [3.66]
FSE OPTION: A = .120 [3.05]



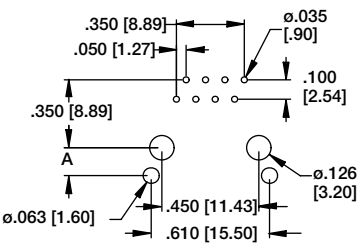
MTJ-88GX1-FSB-PG
Shown with Full Metal Shield
& Panel Ground Tab options

MTJ-88GX1-FSD
Shown with Full
Metal Shield option

#### Recommended PCB Layout (FSD)

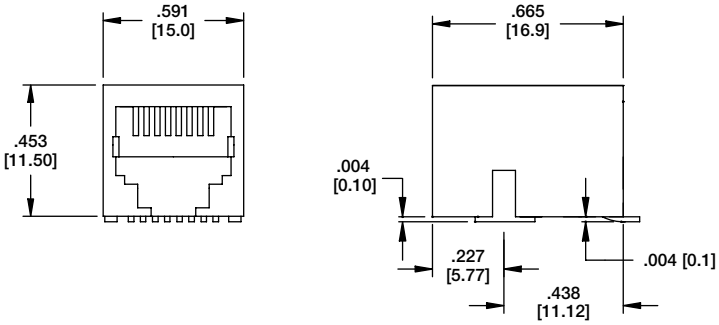


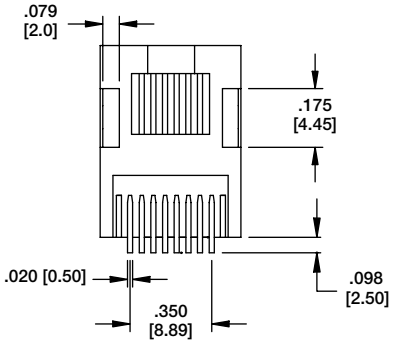

#### PCB Layout (FSA, FSB, & FSE)



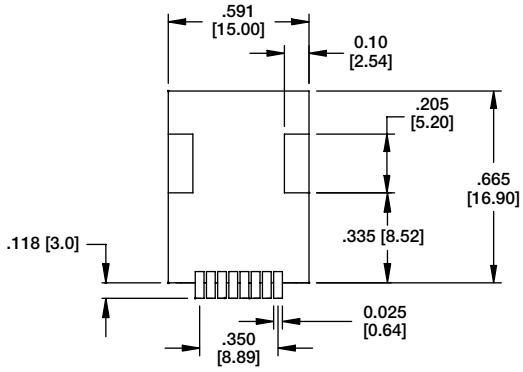
Ordering Information pg. 9

## TYPE WA
SMT TABS IN
8P8C



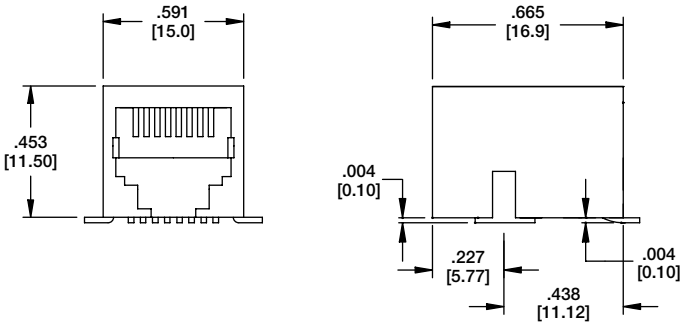



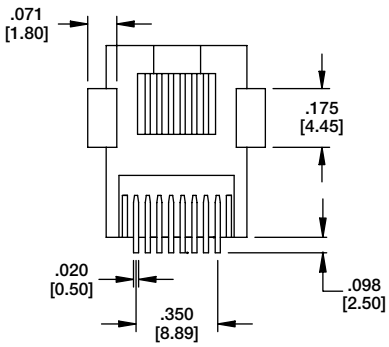
MTJ-88WAX1



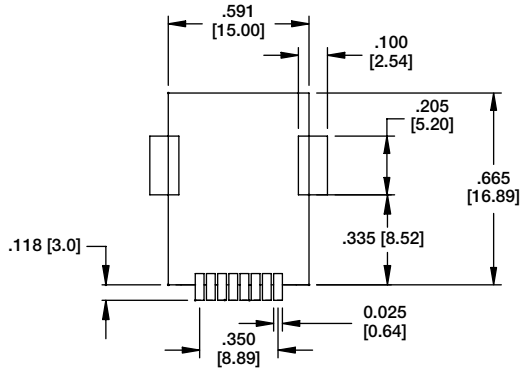

Recommended Solder Pad Layout

## TYPE WB
SMT TABS OUT
8P8C



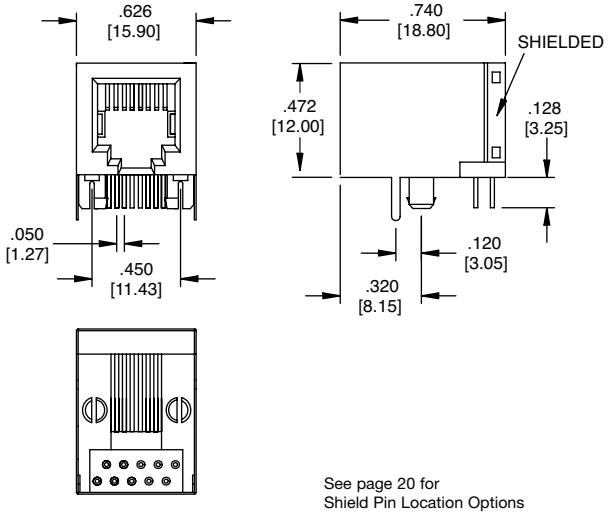
MTJ-88WBX1




Recommended Solder Pad Layout

Ordering Information pg. 9

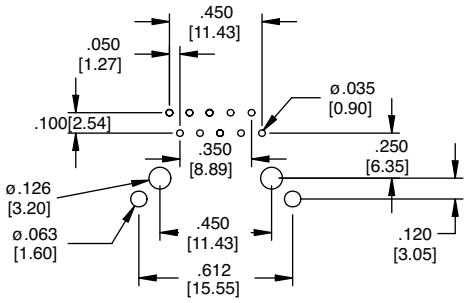
## TYPE W
### SHIELDED, THRU HOLE
### 8P8C
### 10P10C




See page 20 for
Shield Pin Location Options

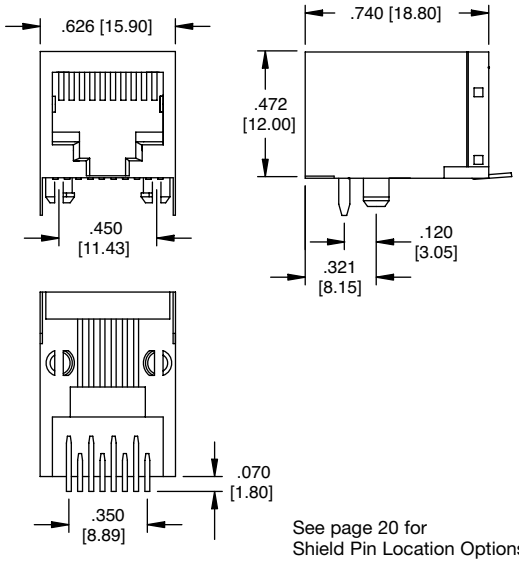
MTJ-88WX1-FSE

MTJ-88WX1-FSE-PG
Shown with optional
panel ground tabs




Recommended PCB Layout

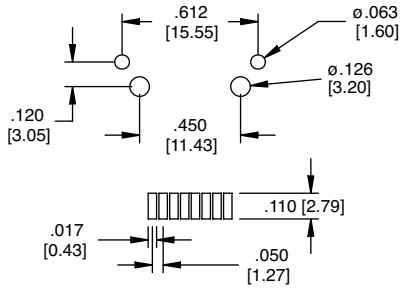
## TYPE W
### SHIELDED SMT WITH PLASTIC PEG
### 8P8C




See page 20 for
Shield Pin Location Options

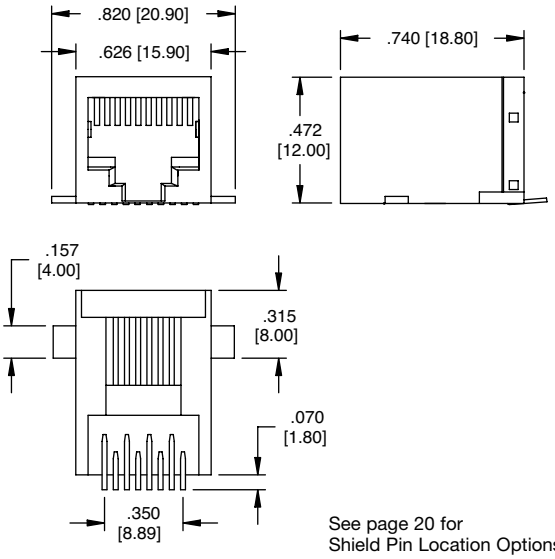
MTJ-88WX1-FSE-SMT

MTJ-88WX1-FSE-SMT-PG
Shown with optional
panel ground tabs




Recommended Solder Pad Layout

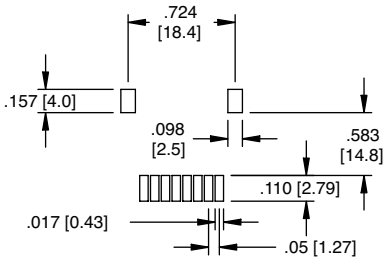
## TYPE W
### SHIELDED TRUE SMT
### 8P8C




See page 20 for
Shield Pin Location Options

MTJ-88WX1-FS-TSMT

MTJ-88WX1-FS-TSMT-PG
Shown with optional
panel ground tabs




Recommended Solder Pad Layout

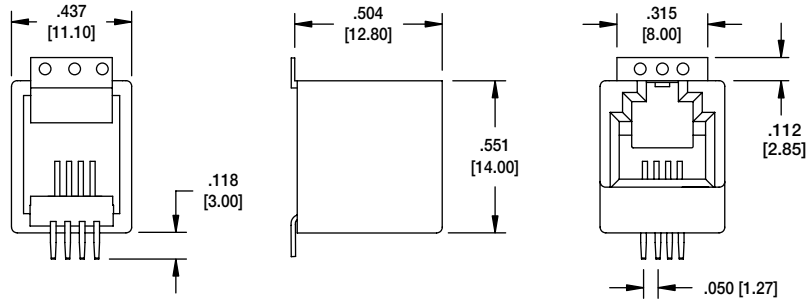
# MODULAR JACKS

## .504" HEIGHT, TOP ENTRY, SMT - TYPE H

MTJ SERIES

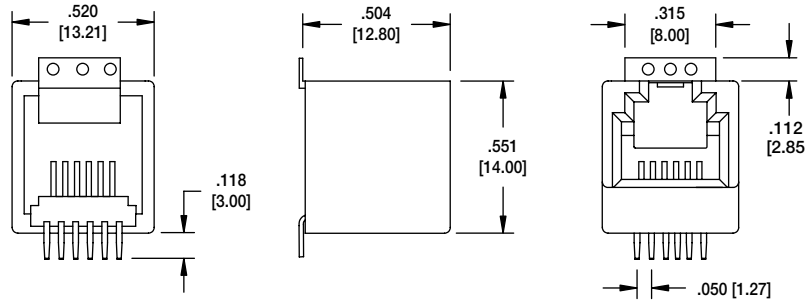
Ordering Information pg. 9

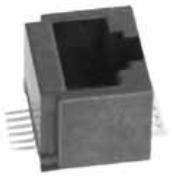
### TYPE H
4P4C



MTJ-44HX1

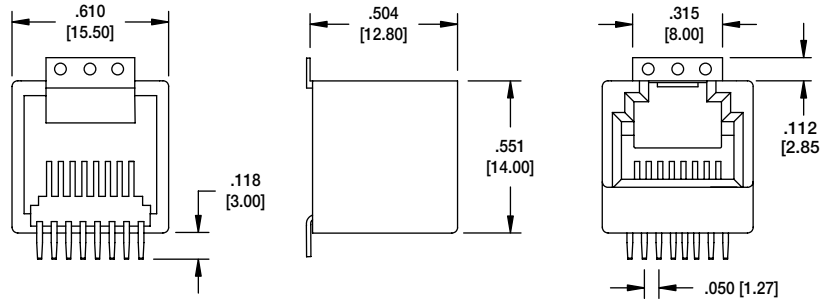
### TYPE H
6P6C



MTJ-66HX1

### TYPE H
8P8C

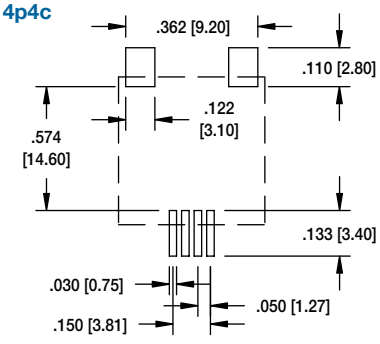


MTJ-88HX1

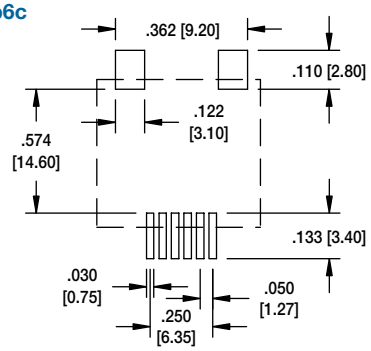
MTJ-88HX1-FS

## Recommended PCB Layout

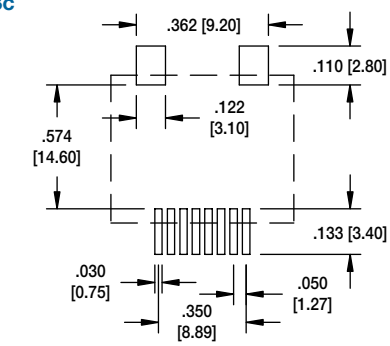
### 4p4c




### 6p6c




### 8p8c



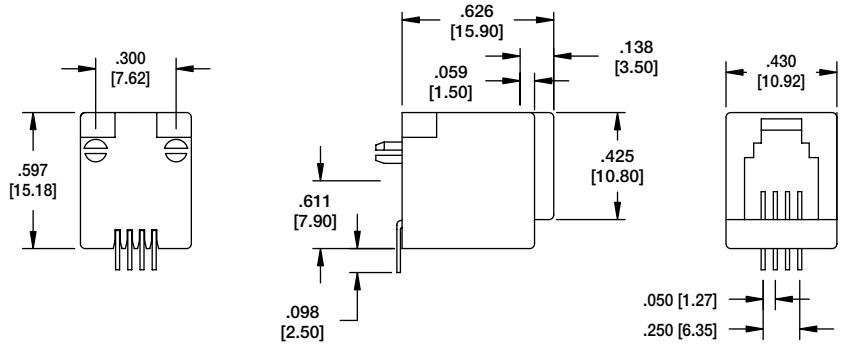
# MODULAR JACKS

## .626" HEIGHT, TOP ENTRY, SMT - TYPE K

MTJ SERIES

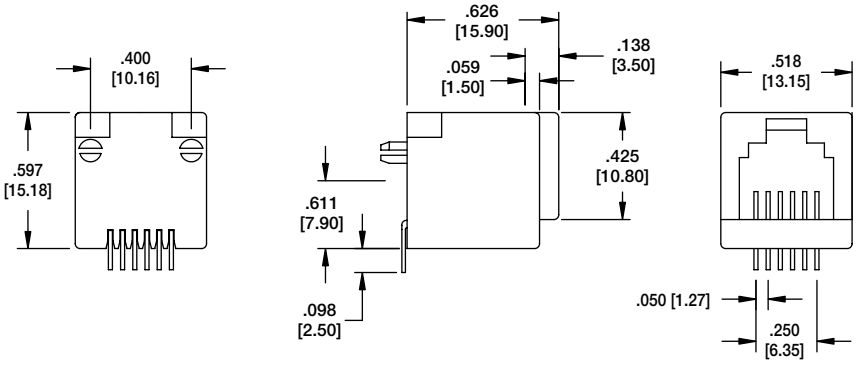
Ordering Information pg. 9

### TYPE K
4P4C



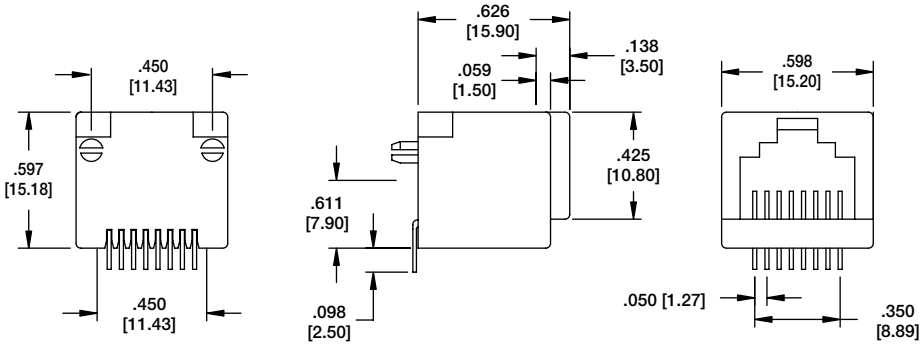
MTJ-44KX1

### TYPE K
6P4C
6P6C



MTJ-66KX1

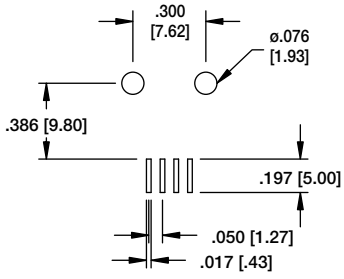
### TYPE K
8P8C



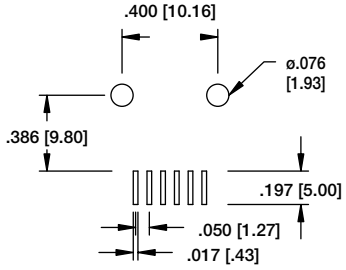
MTJ-88KX1

## Recommended PCB Layout

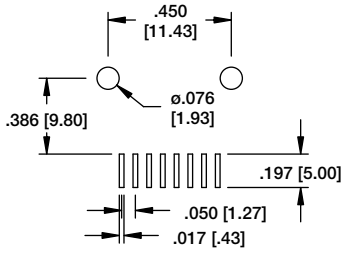
### 4p4c




### 6p6c

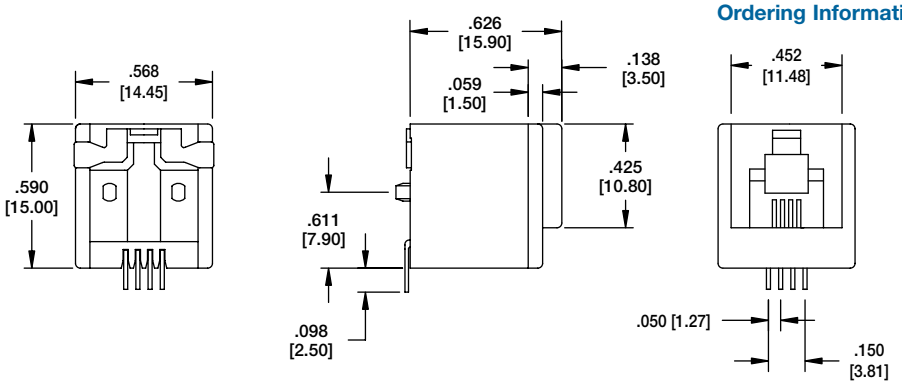



### 8p8c



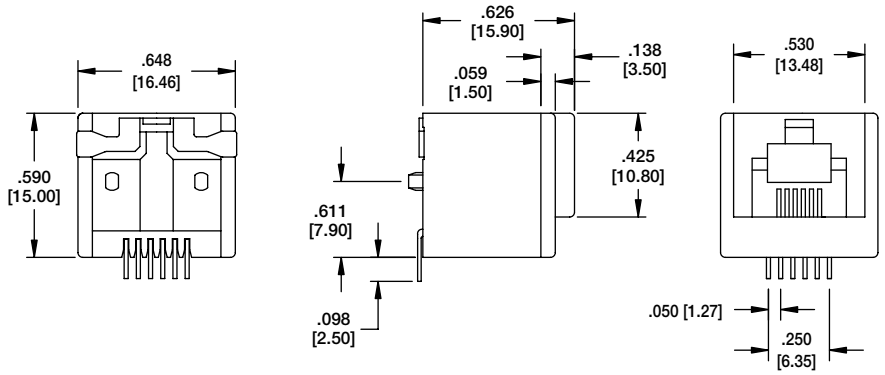
Ordering Information pg. 9

**TYPE V**
**4P4C**



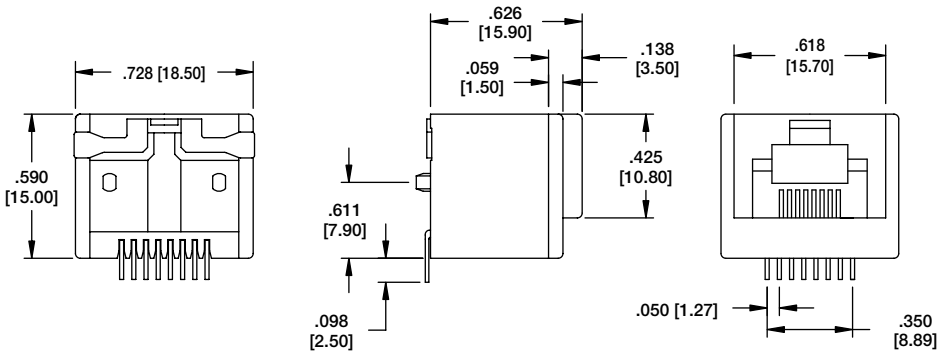
MTJ-44VX1

**TYPE V**
**6P6C**
**6P4C**



MTJ-66VX1

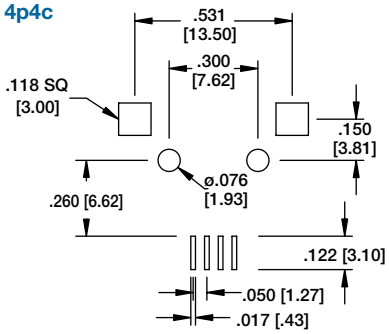
**TYPE V**
**8P8C**



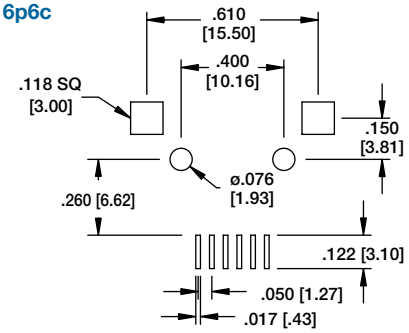
MTJ-88VX1

### Recommended PCB Layout

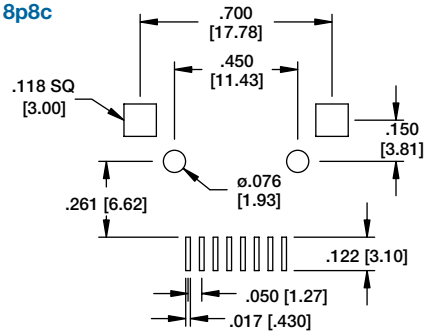
**4p4c**




**6p6c**

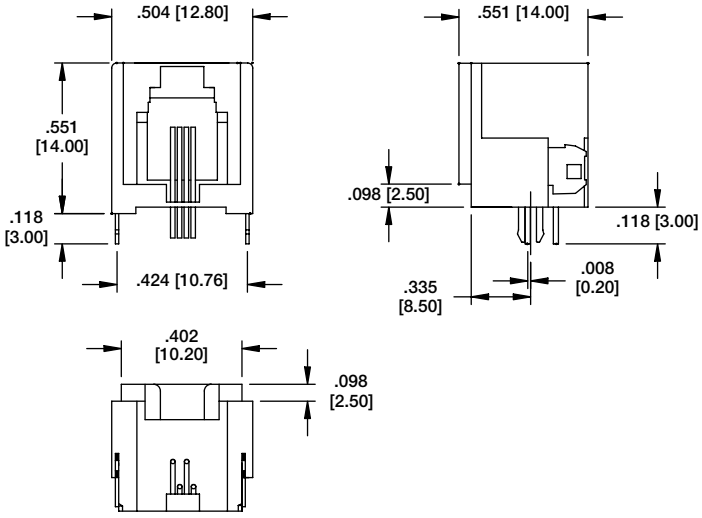



**8p8c**

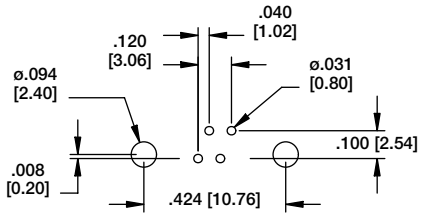


Ordering Information pg. 9

## TYPE E
4P4C

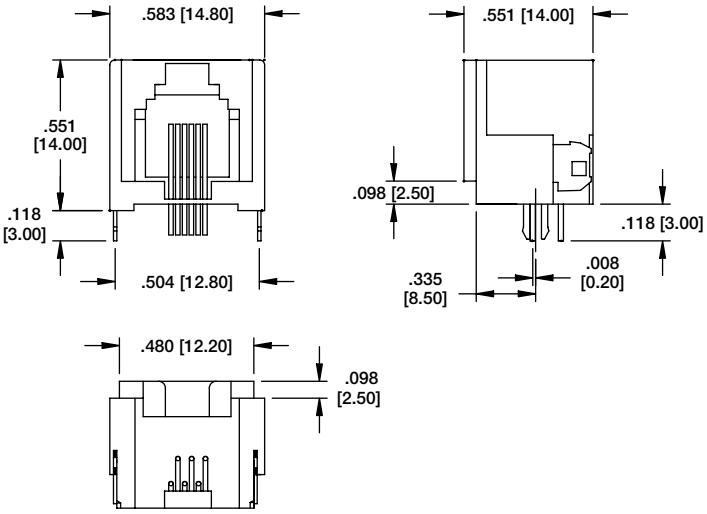


MTJ-44EX1

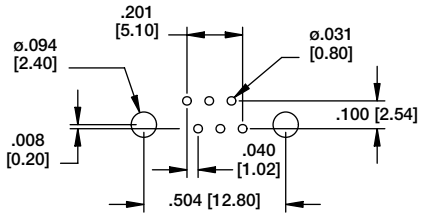



Recommended PCB Layout

## TYPE E
6P4C
6P6C

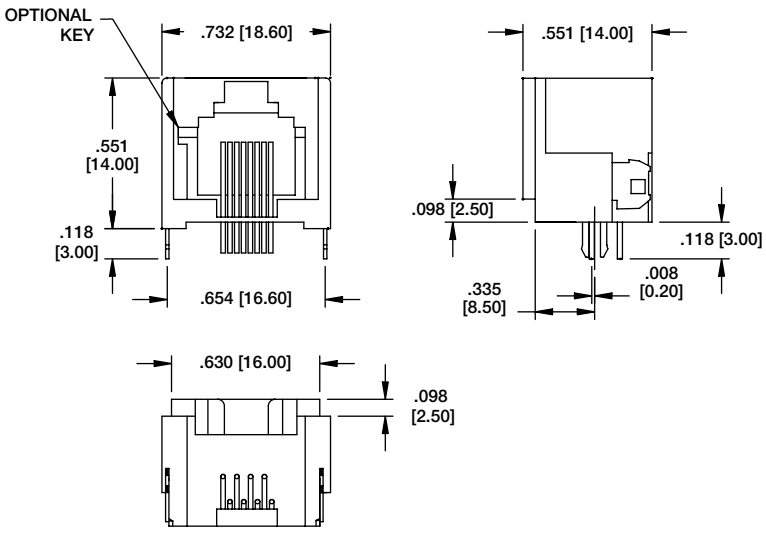


MTJ-66EX1

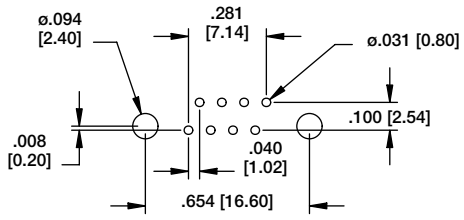



Recommended PCB Layout

## TYPE E
8P8C



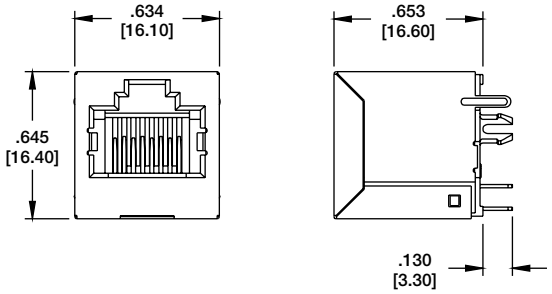
MTJ-88EX1




Recommended PCB Layout

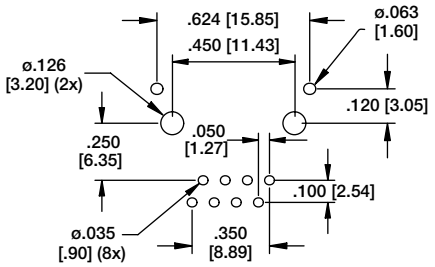
Ordering Information pg. 9

## TYPE A
### CAT. 5, TOP ENTRY
### 8P8C

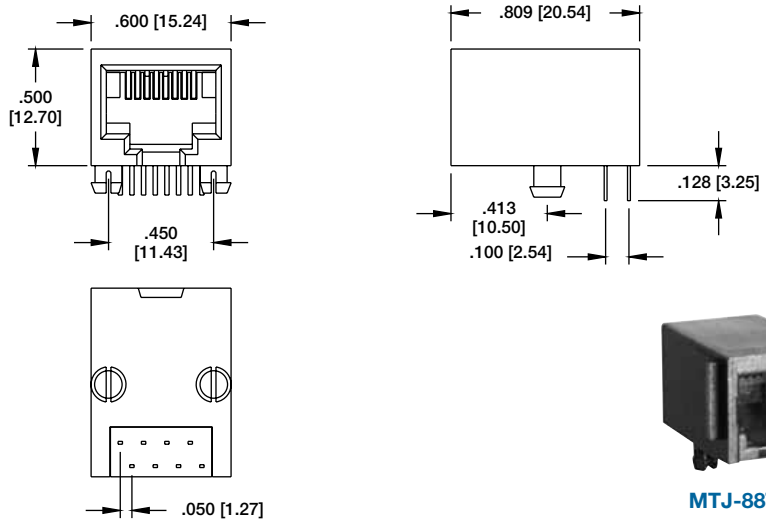


MTJ-88AX1-FSE

### Recommended PCB Layout

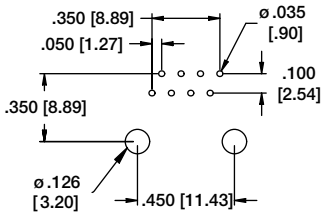



## TYPE T
### CAT. 5, SIDE ENTRY
### 8P8C

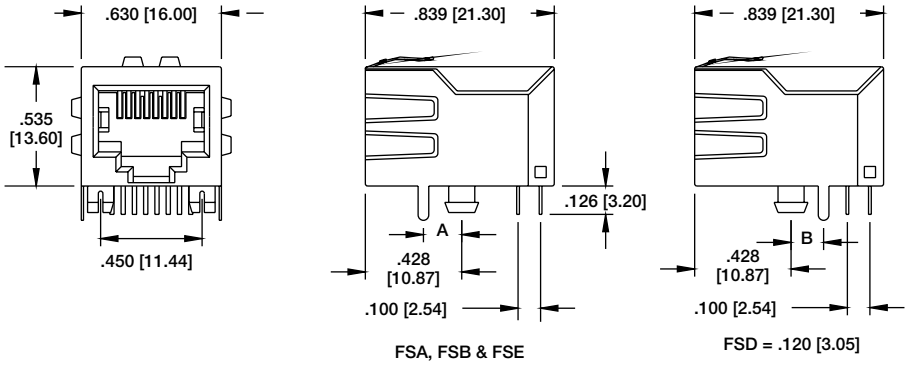


MTJ-88TX1

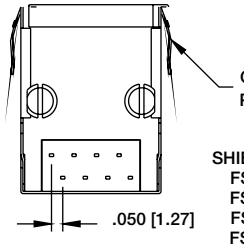
### Recommended PCB Layout




## TYPE T
### CAT. 5, SHIELDED
### 8P8C



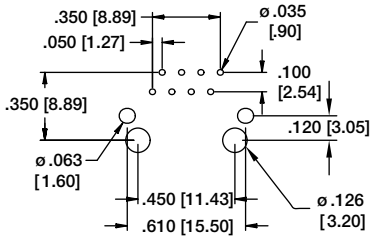
**MTJ-88TX1-FSE-PG**
Available with or without panel ground tabs



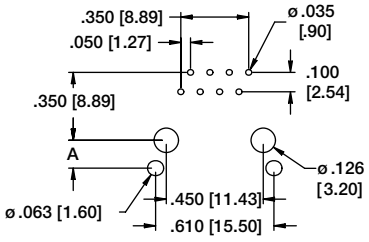

OPTIONAL
PANEL GROUND TABS

Dimensions A & B
SHIELD PIN LOCATION OPTIONS
FSA OPTION: A = .170 [4.32]
FSB OPTION: A = .144 [3.66]
FSE OPTION: A = .120 [3.05]
FSD OPTION: B = .120 [3.05]

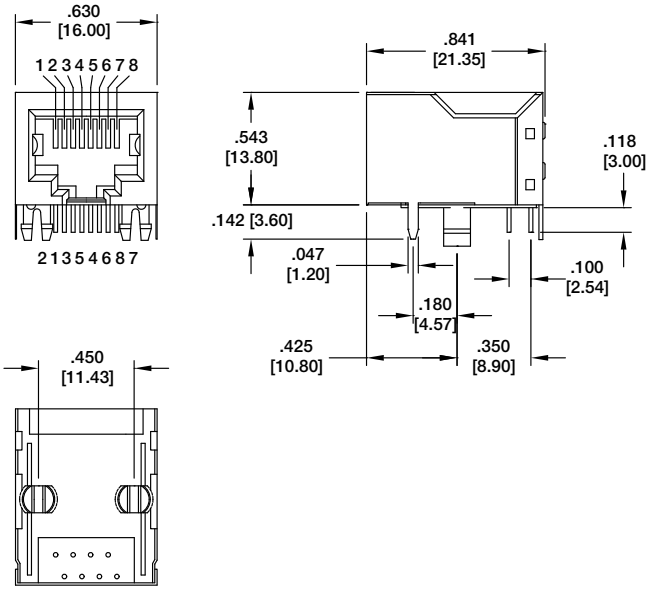
### PCB Layout (FSD)




### PCB Layout (FSA, FSB & FSE)

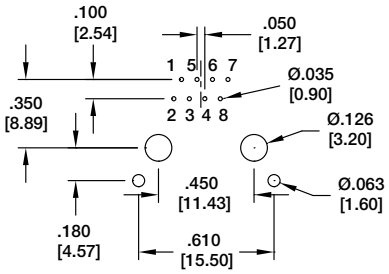


## TYPE T
### CAT. 5e, SHIELDED



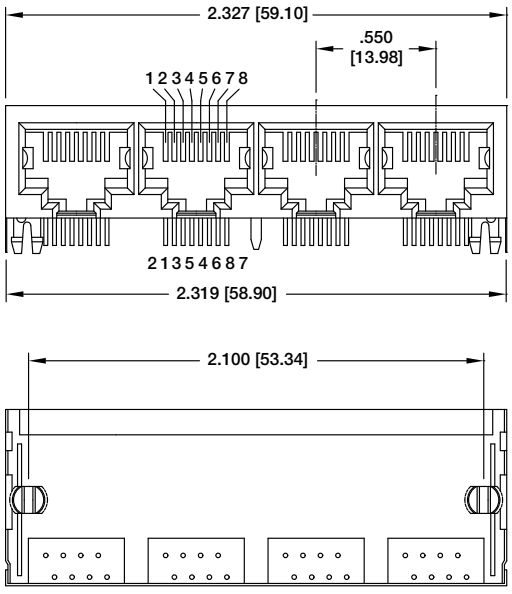
MTJ-88TX1-FSG-C5e

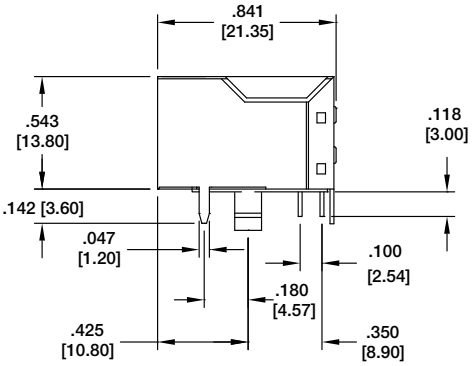
MTJ-88TX1-FSG-PG-C5e



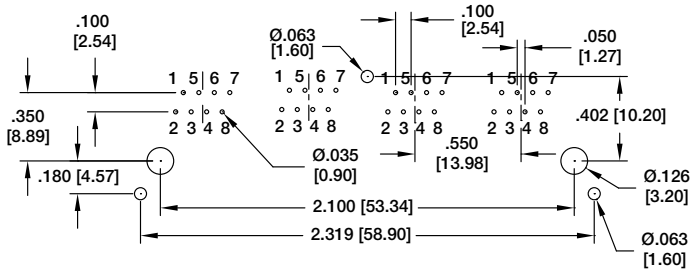

Recommended PCB Layout

## TYPE T
### GANGED
### CAT. 5e, SHIELDED

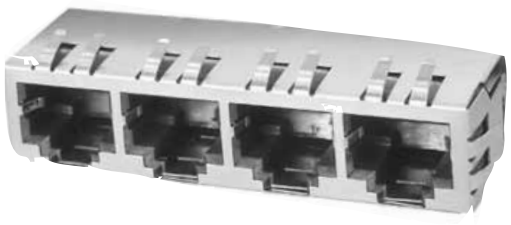


MTJG-4-88TX1-FSG-C5e




Recommended PCB Layout

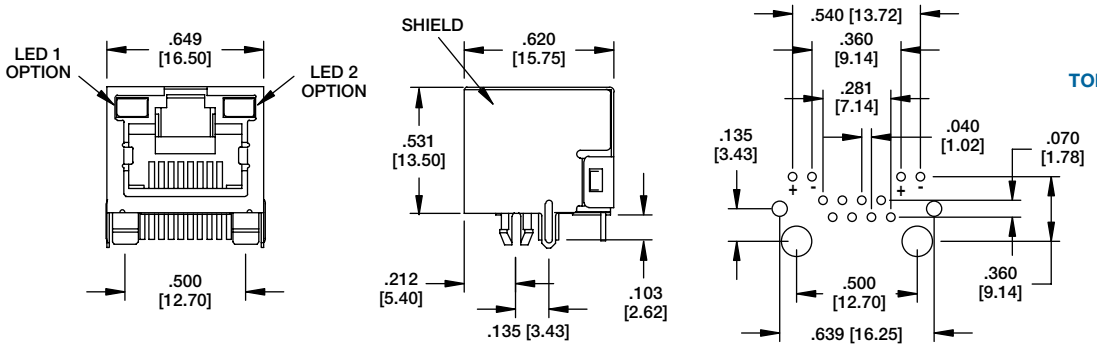


MTJG-4-88TX1-FSG-PG-C5e

# MODULAR JACKS WITH LEDs

## LED JACKS - TYPE AA, AR & D

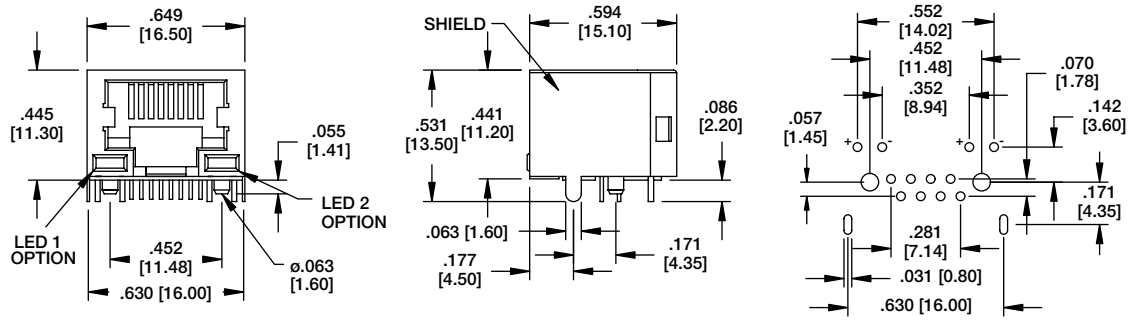
MTJ SERIES




### TYPE AR

**LED JACK .531" HEIGHT**
**TOP TAB & TOP LEDs, THRU HOLE**
**8P8C**

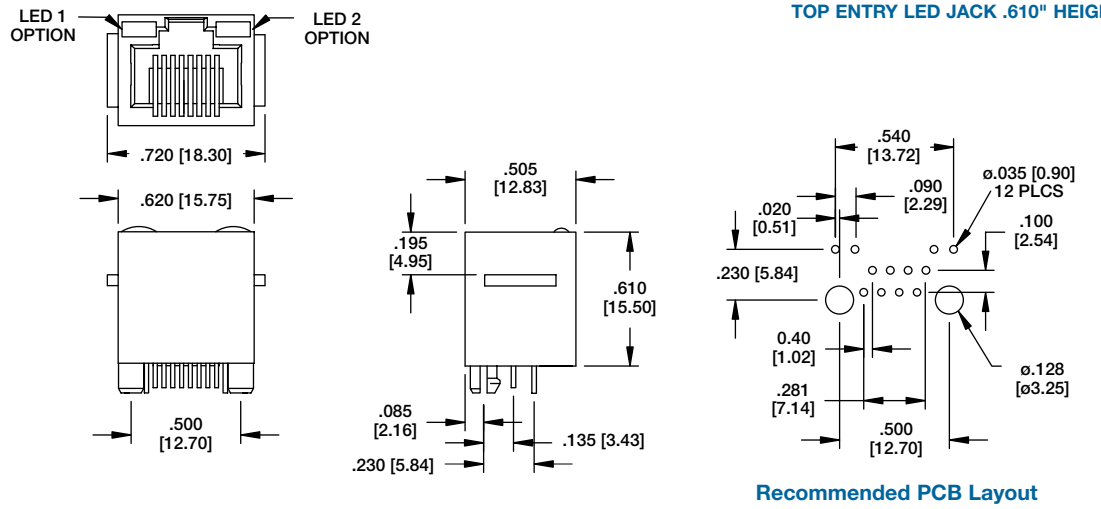
**MTJ-88ARX1-FS-LG**
Also available with panel ground tabs




### TYPE AA

**LED JACK BOTTOM TAB & BOTTOM LEDs THRU HOLE**
**8P8C**

**MTJ-88AAX1-FS-LG**




Recommended PCB Layout

### TYPE D

**TOP ENTRY LED JACK .610" HEIGHT WITH LEDs, NON-SHIELDED**
**8P8C**

**MTJ-88DX1-LG**

Add suffix to end of P/N:

| LED CONFIGURATION | | |
|---|---|---|
| SUFFIX | LED 1 | LED 2 |
| LA | YELLOW | YELLOW |
| LD | GREEN | GREEN |

See pg. 43 for additional LED options

## JACKS WITH LEDs ORDERING INFORMATION

| MTJ | 8 | 8 | AR | 2 | 1 | LD |
|---|---|---|---|---|---|---|

**SERIES INDICATOR**
**MTJ** = Modular telephone jack

**HOUSING PLUG SIZE**
8 or 10

**NO. OF CONTACT POSITIONS FILLED**
6, 8 or 10

**HOUSING TYPE**
AR, AA, D, G

**PLATING**
**X** = Gold Flash
**0** = 15 µin gold
**1** = 30 µin gold
**2** = 50 µin gold

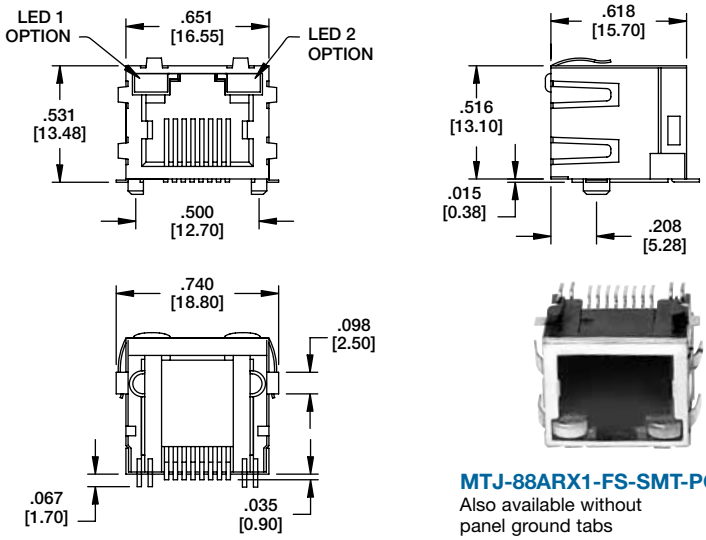
**BODY COLOR**
**1** = Black
**2** = Gray

**LED CONFIGURATION**
See Chart above
*Leave blank for no LEDs*

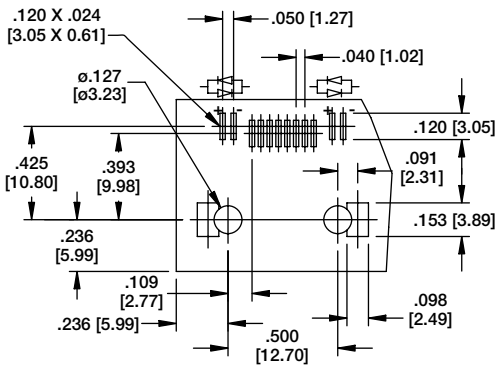
**OPTIONS:**
**SMT** = Surface mount tails with Hi-Temp insulator
**PG** = Panel Ground Tabs
**LX** = LEDs, use LA, LD, LG, LH, LI, see LED Configuration Chart

Ordering Information pg. 29

## TYPE AR
### WITH SMT OPTION
### 8P8C



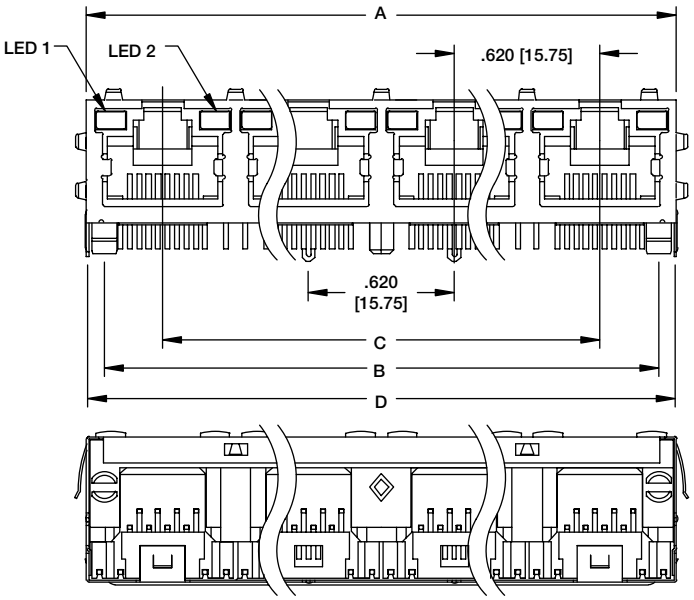

**MTJ-88ARX1-FS-SMT-PG-LG**
Also available without panel ground tabs

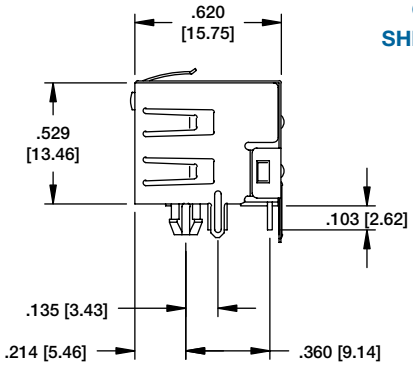


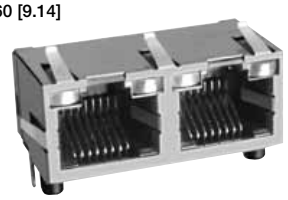

Recommended PCB Layout

Ordering Information pg. 34

## TYPE AR
### GANGED WITH METAL SHIELD, PANEL GROUND TABS AND LED OPTION
### 8P8C



**MTJG-4-88ARX1-FSM-PG-LG**

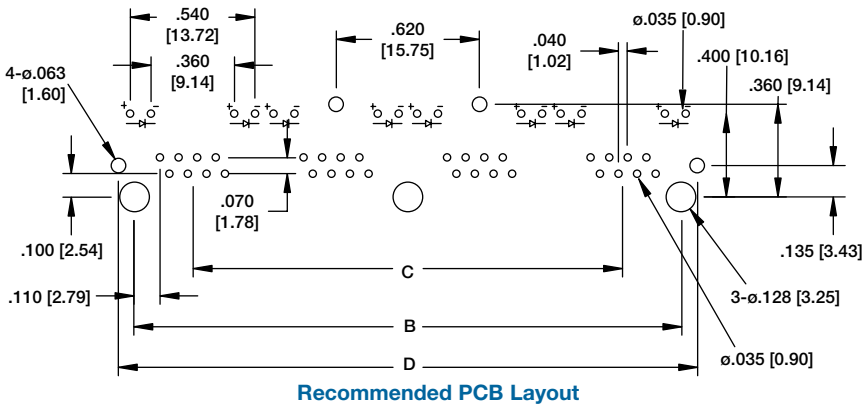
Shown with metal shield, panel ground tabs and LED options

Add suffix to end of P/N:

| LED CONFIGURATION | | |
|---|---|---|
| SUFFIX | LED 1 | LED 2 |
| LA | YELLOW | YELLOW |
| LD | GREEN | GREEN |

**2, 4 & 8 Ports available**
See pg. 43 for additional LED options

A = .620 [15.75] x No. of Ports + .029 [0.75]
B = .620 [15.75] x No. of Ports - 1 + .500 [12.70]
C = .620 [15.75] x No. of Ports - 1
D = .620 [15.75] x No. of Ports + .019 [0.50]




Recommended PCB Layout

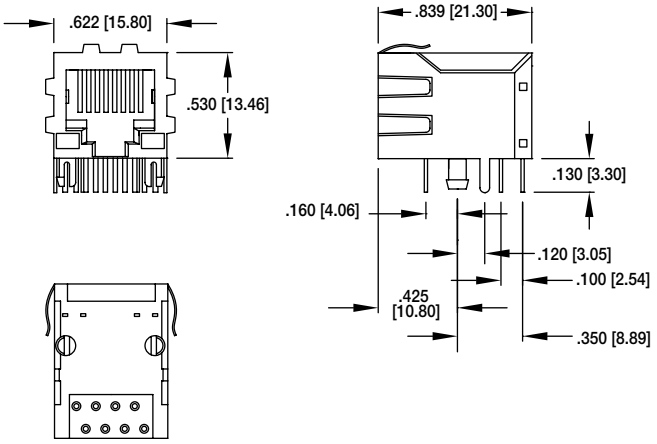
# MODULAR JACKS WITH LEDs

## SINGLE & GANGED LED JACKS - TYPE G & J

MTJ SERIES

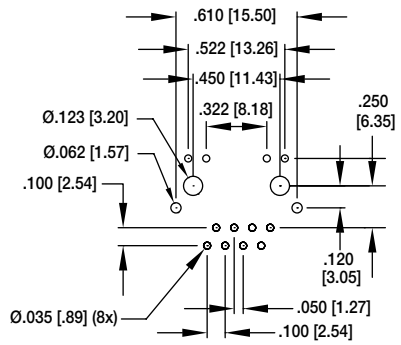
Ordering Information pg. 29

### TYPE G
WITH LEDs



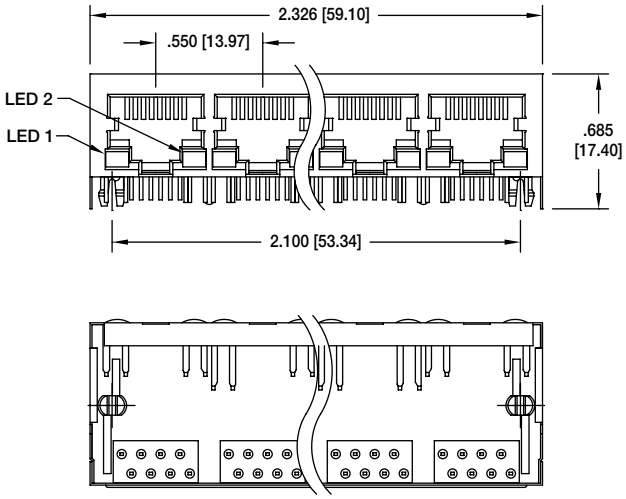
MTJ-88GX1-FSD-LH

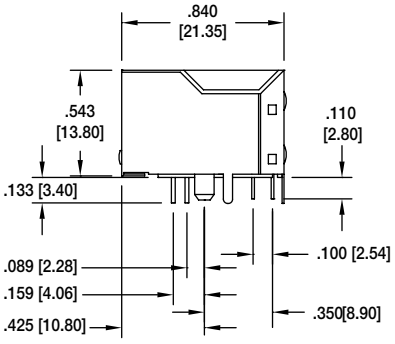
MTJ-88GX1-FSD-LH-PG



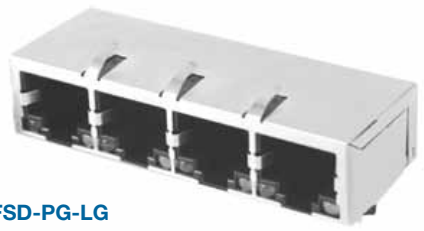

Recommended PCB Layout

### TYPE G GANGED
WITH LEDs



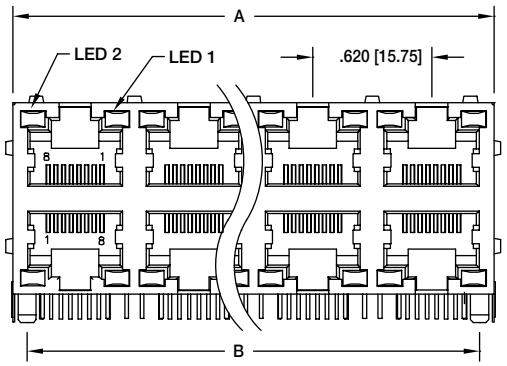

2, 4 & 6 PORTS AVAILABLE

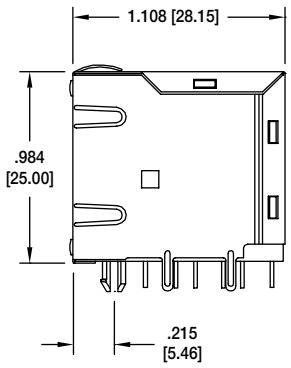


MTJG-4-88GX1-FSD-PG-LG

Ordering Information pg. 34

### TYPE J STACKED
WITH LEDs




| PART NUMBER | PORTS | DIMENSIONS | |
|---|---|---|---|
| | | A | B |
| MTJG-2-88JX1-FSM-LXX | 2 X 1 | .650 [16.51] | .500 [12.70] |
| MTJG-4-88JX1-FSM-LXX | 2 X 2 | 1.265 [32.15] | 1.120 [28.45] |
| MTJG-8-88JX1-FSM-LXX | 2 X 4 | 2.50 [63.65] | 2.360 [59.95] |
| MTJG-12-88JX1-FSM-LXX | 2 X 6 | 3.74 [95.15] | 3.600 [91.45] |

See pg. 43 for additional LED options

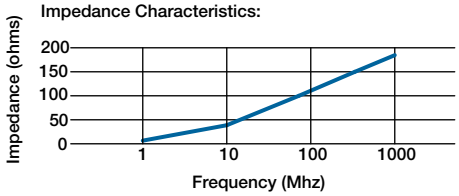
## FILTERED MODULAR JACKS

Inductive filtered modular jacks improve signal integrity and are available in a variety of styles including tin plated copper shielding with a choice of magnetic transformer or ferrite filter. Adam Tech offers drop in equivalents to all industry standard filtered jacks

Ordering Information pg. 9

**TYPE M**
**EMI FERRITE FILTERED JACK**

Impedance Characteristics:



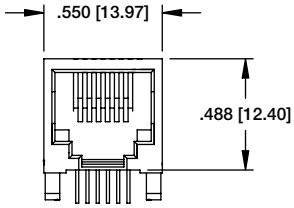
**MTJ-88MX1**
Non-Shielded

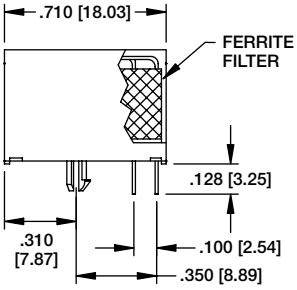
**MTJ-88MX1-FSE**
Metal Shielded

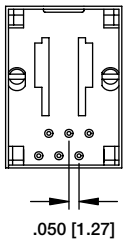
**MTJ-88MX1-FSE-PG**
Metal Shielded with panel ground tabs

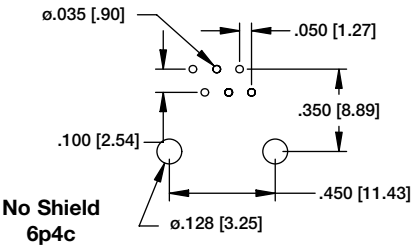
### EMI FERRITE FILTERED JACK

**TYPE M**
**6P6C**
**6P4C**



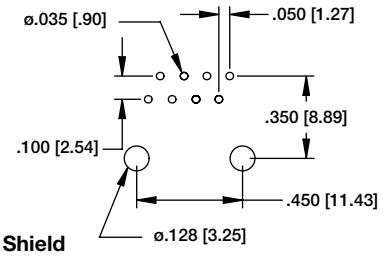




**No Shield**
**6p4c**
**6p6c**

**Recommended PCB Layout**

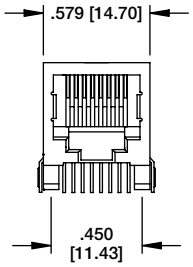


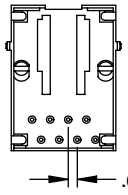

**No Shield**
**8p8c**

**Recommended PCB Layout**

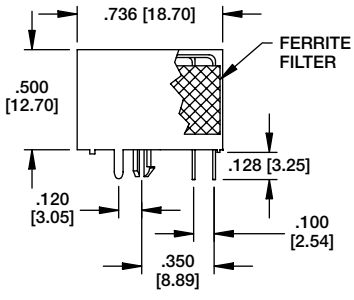
### EMI FERRITE FILTERED & SHIELDED JACK

**TYPE M**
**8P8C**



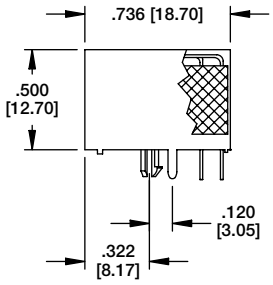




FSE Shield Pin Location

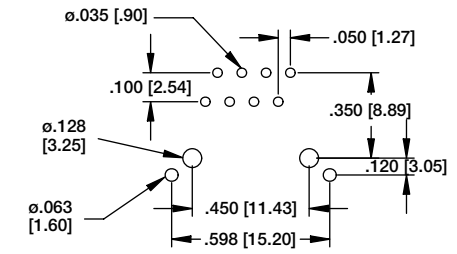



**MTJ-88MX1-FSE**

FSD Shield Pin Location

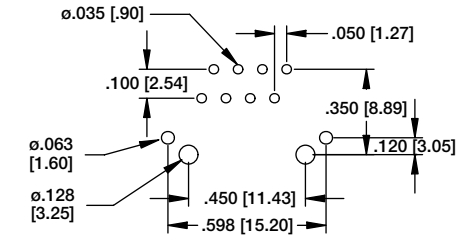



**MTJ-88MX1-FSD**




**FSE Shield**
**8p8c**

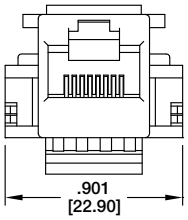
**Recommended PCB Layout**

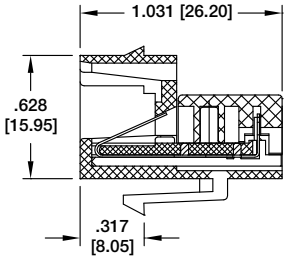


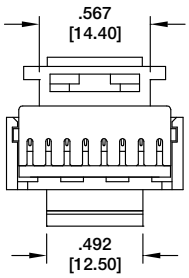

**FSD Shield**
**8p8c**

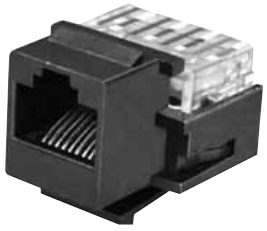
**Recommended PCB Layout**

## CAT. 3 KEYSTONE JACK
### 8 POSITION 8 CONTACT



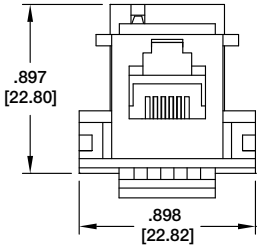



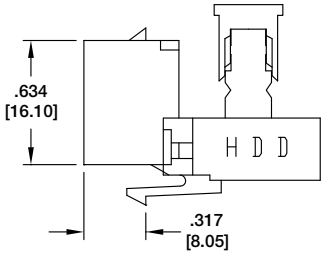



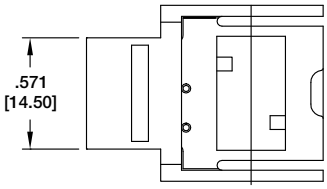



MTJK-88-10

## CAT. 3 KEYSTONE JACK
### 6 POSITION 4 CONTACT

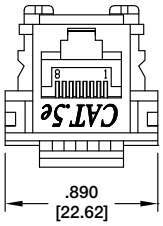


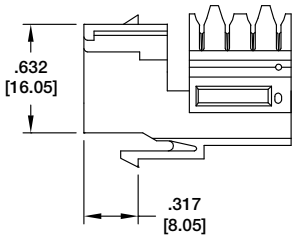



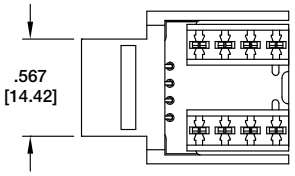



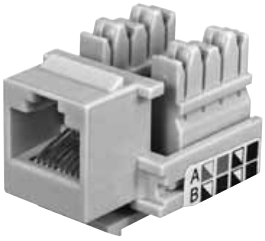
MTJK-64-29

## CAT. 5E KEYSTONE JACK
### 8 POSITION 8 CONTACT



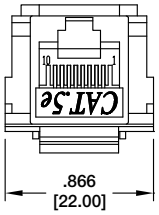



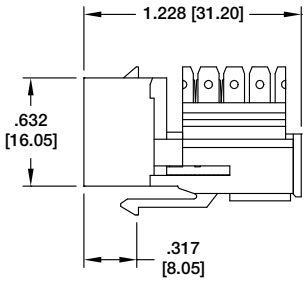



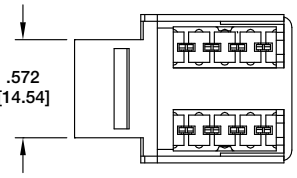



MTJK-88-02-C5E

## CAT. 5E KEYSTONE JACK
### 8 POSITION 8 CONTACT

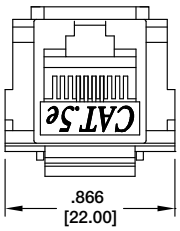


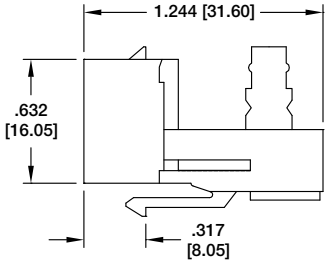



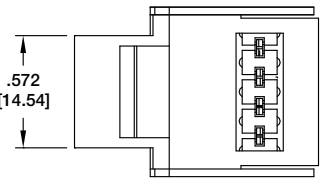



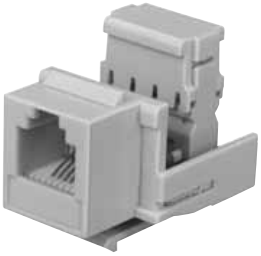
MTJK-88-05-C5E

## CAT. 5E KEYSTONE JACK
### 8 POSITION 4 CONTACT



MTJK-84-01-C5E

## ORDERING INFORMATION
## GANGED JACKS WITHOUT LEDs

| MTJG | 2 | 64 | 2 | 2 | 1 |
|---|---|---|---|---|---|

**SERIES INDICATOR**
**MTJG** = Ganged Telephone Jack

**NO. OF PORTS**
2 thru 16

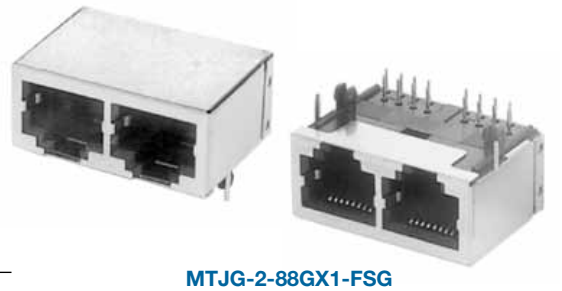
**PORT SIZE / POSITIONS FILLED**
64 = 6 position, 4 contacts (6P4C)
66 = 6 position, 6 contacts (6P6C)
88 = 8 position, 8 contacts (8P8C)

**HOUSING TYPE**
2, 2B, 2C, 5, 7H, 7V, AR, C, G, J, N

**CONTACT PLATING**
X = Gold flash
0 = 15 µin. gold
1 = 30 µin. gold
2 = 50 µin. gold

**HOUSING COLOR**
1 = Black
2 = Medium Gray (Housing Type 7 only)

MTJG-12-88JX1-FSG-PG



MTJG-2-88GX1-FSG

## ORDERING INFORMATION
## GANGED JACKS WITH LEDs

| MTJG | 2 | 64 | AR | 2 | 1 | LD |
|---|---|---|---|---|---|---|

**SERIES INDICATOR**
**MTJG** = Ganged Telephone Jack

**NO. OF PORTS**
2, 4, 6, 8, 12 or 16

**PORT SIZE / POSITIONS FILLED**
62 = 6 position, 2 contacts (6P2C)
64 = 6 position, 4 contacts (6P4C)
66 = 6 position, 6 contacts (6P6C)
88 = 8 position, 8 contacts (8P8C)

**HOUSING TYPE**
AR, G, J

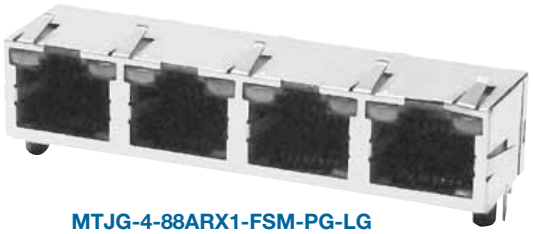
**CONTACT PLATING**
**X** = Gold flash
**0** = 15 µin. gold
**1** = 30 µin. gold
**2** = 50 µin. gold

**HOUSING COLOR**
1 = Black

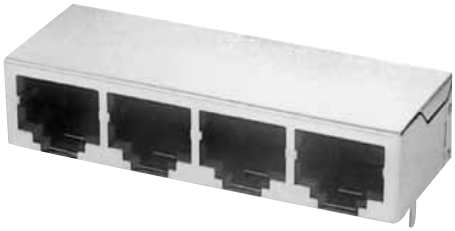
**LED CONFIGURATION**
See Chart Below

Add suffix to end of P/N:

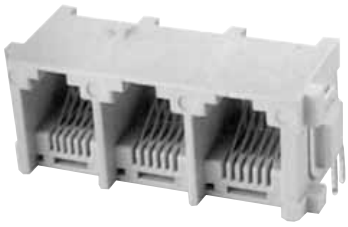
| LED CONFIGURATION | | |
|---|---|---|
| SUFFIX | LED 1 | LED 2 |
| LA | YELLOW | YELLOW |
| LD | GREEN | GREEN |
| LG | YELLOW | GREEN |
| LH | GREEN | YELLOW |
| LI | ORANGE/ GREEN | ORANGE/ GREEN |



MTJG-4-88ARX1-FSM-PG-LG



MTJG-4-88GX1-FSB

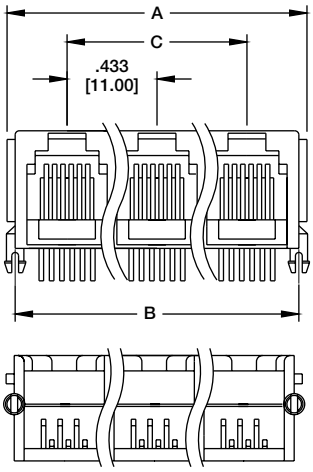


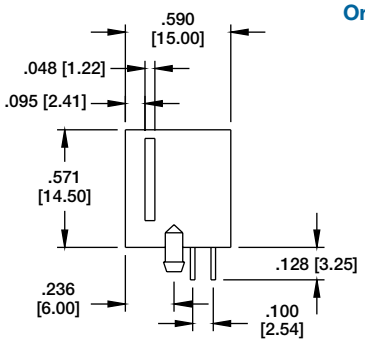
MTJG-3-667HX2

**OPTIONS:**
Add as suffix to basic part no.
**FSX** = Full metal shield
**PG** = Panel ground tabs
**SMT** = Surface mount tails with Hi-Temp insulation for hi-temp soldering processes up to 260°C

Ordering Information pg. 34

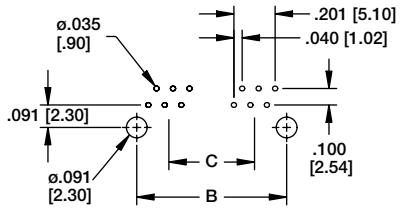
## TYPE 2
6P4C
6P6C



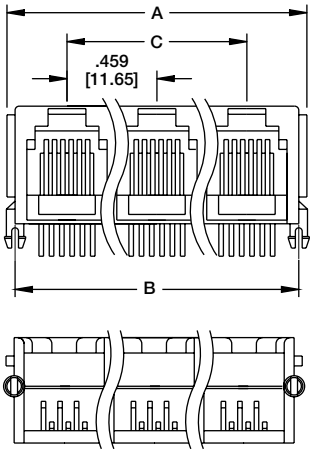
MTJG-2-642X1

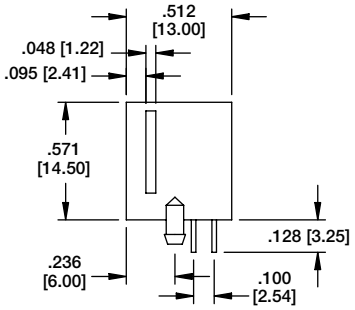
A = .433 [11.00] x No. of Ports + .100 [2.54]
B = .433 [11.00] X No of Ports + .020 [0.50]
C = .433 [11.00] x No of Ports - 1




Recommended PCB Layout

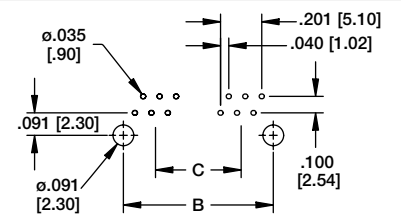
## TYPE 2B
6P4C
6P6C



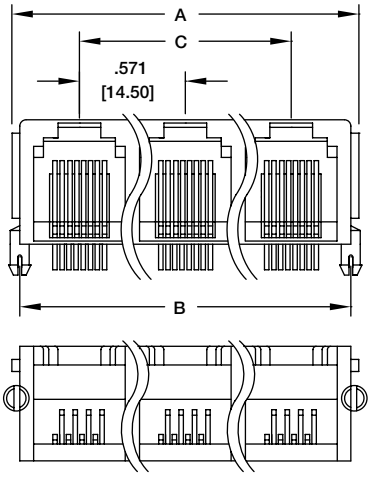
MTJG-2-642BX1

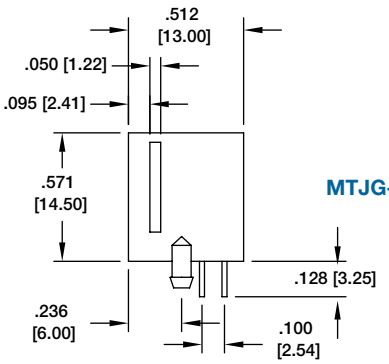
A = .459 [11.65] x No. of Ports + .100 [2.54]
B = .459 [11.65] X No of Ports + .020 [0.50]
C = .459 [11.65] x No of Ports - 1

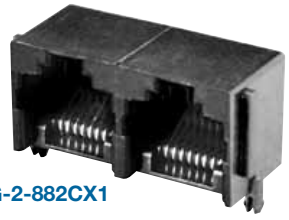



Recommended PCB Layout

## TYPE 2C
8P8C

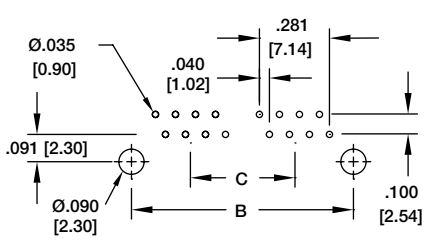


MTJG-2-882CX1

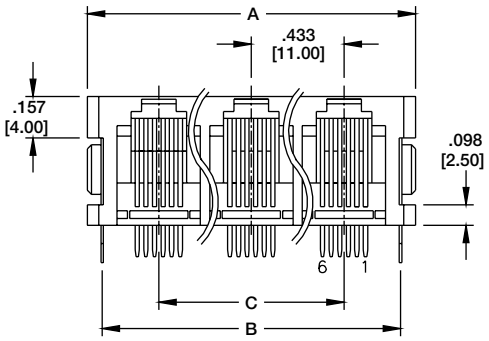
A = .571 [14.50] X No. of ports + .122 [3.10]
B = .571 [14.50] X No. of Ports + .019 [0.50]
C = .571 [14.50] X No. of Port -1

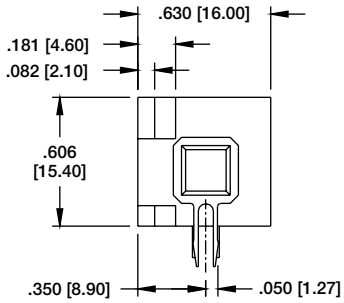


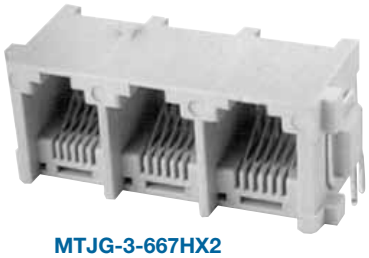

Recommended PCB Layout

Ordering Information pg. 34

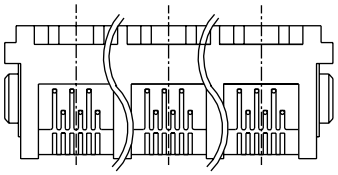
## TYPE 7H
RIGHT ANGLE ENTRY
6P4C
6P6C

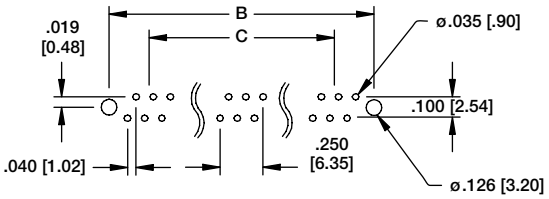


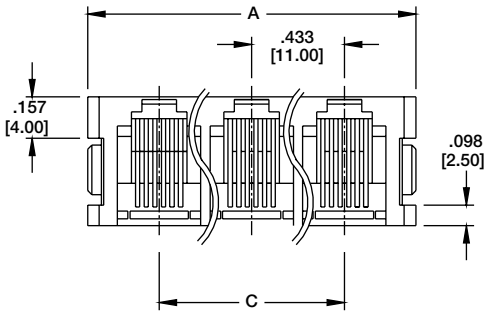
MTJG-3-667HX2

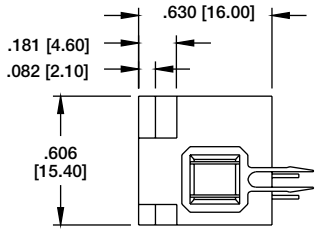


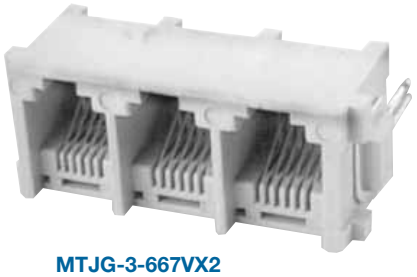



Recommended PCB Layout

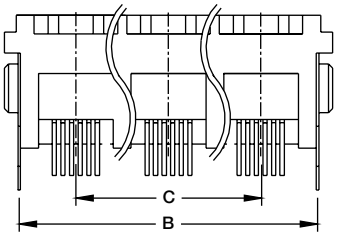
## TYPE 7V
TOP ENTRY
6P4C
6P6C

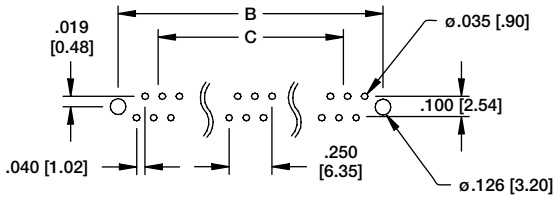


MTJG-3-667VX2



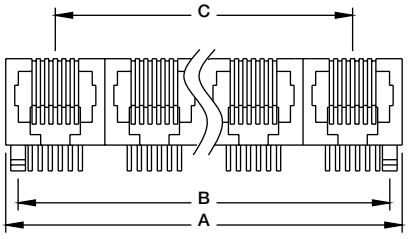

Recommended PCB Layout

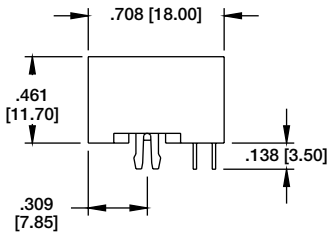
| DIMENSION | No of Ports | | | | | | |
|---|---|---|---|---|---|---|---|
| | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| A | 1.110 [28.20] | 1.543 [39.20] | 1.976 [50.20] | 2.409 [61.20] | 2.843 [72.20] | 3.275 [83.20] | 3.710 [94.20] |
| B | .992 [25.20] | 1.425 [36.20] | 1.858 [47.20] | 2.291 [58.20] | 2.724 [69.20] | 3.157 [80.20] | 3.590 [91.20] |
| C | .433 [11.00] | .886 [22.00] | 1.299 [33.00] | 1.732 [44.00] | 2.165 [55.00] | 2.598 [66.00] | 3.030 [77.00] |

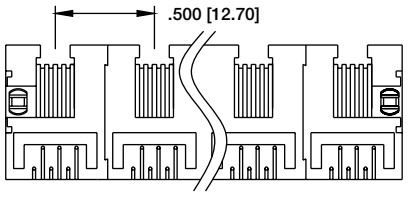
# MODULAR JACKS

## GANGED JACKS, LOW PROFILE
## THRU HOLE & SMT - TYPE 5 & N

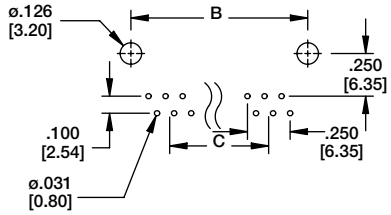
MTJG SERIES



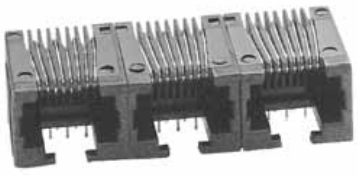




A = .500 [12.70] X (NO. OF PORTS -1) + .519 [13.20]
B = .500 [12.70] X (NO. OF PORTS -1) + .400 [10.16]
C = .500 [12.70] X NO. OF PORTS -1



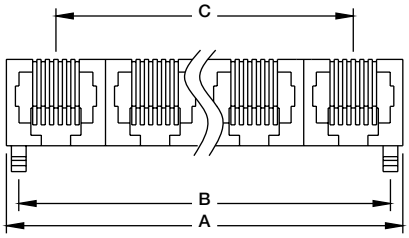

Recommended PCB Layout

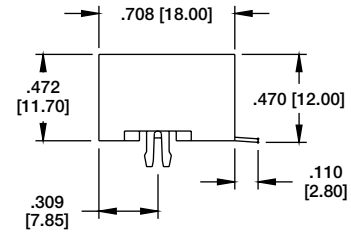


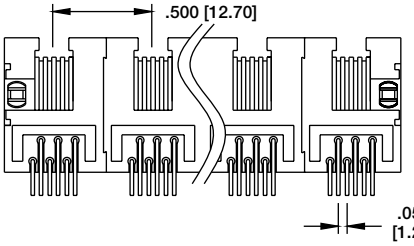
**TYPE 5**
**THRU HOLE**
**6P4C**
**6P6C**

MTJG-3-665X1

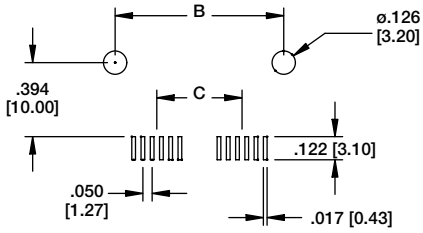
Ordering Information pg. 34



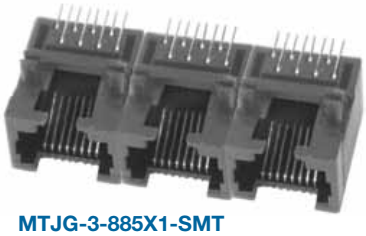




A = .500 [12.70] X (NO. OF PORTS -1) + .519 [13.20]
B = .500 [12.70] X (NO. OF PORTS -1) + .400 [10.16]
C = .500 [12.70] X NO. OF PORTS -1



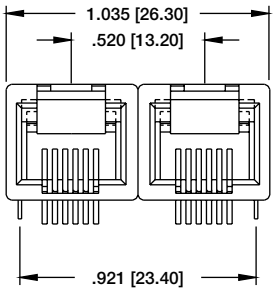

Recommended PCB Layout

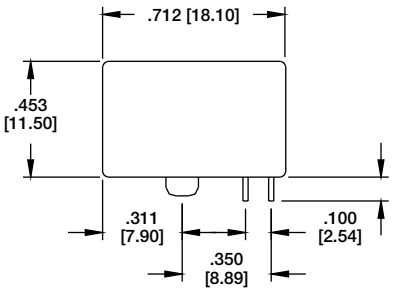


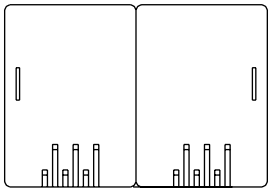
**TYPE 5**
**SMT**
**8P8C**

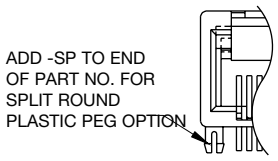
MTJG-3-885X1-SMT
Available in 6P6C or 8P8C Versions

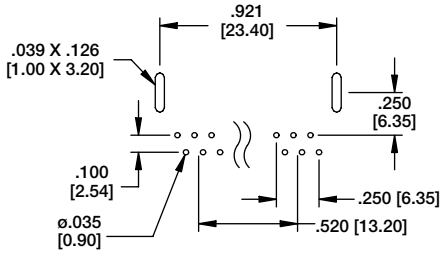
Ordering Information pg. 34






Recommended PCB Layout

**TYPE N**
**METAL PEG**
**6P4C**
**6P6C**

MTJG-2-66nx1

**INTRODUCTION:**
Adam Tech MTJ series RJ-45 connectors with integrated magnetics are designed to support Base 10, 100 and 1000-T applications such as hubs, routers, ADSL modems, and ATM transmission equipment. The integrated magnetics allows the design engineer to save PC board real-estate and lower the total part count per system. This series meets all applicable specifications for CAT 5, 5e, 6 and IEEE 802.3. The USB model meets all applicable USB 2.0 specifications. All configurations are available with optional LED's.

**FEATURES:**
Single, stacked and ganged configurations available All products have a full metal shield to guard against electromagnetic interference. Hi-Temp option availableAll products are fully lead free and RoHS compliant

**MATING PLUGS:**
Adam Tech modular telephone plugs and all industry standard telephone plugs.

**SPECIFICATIONS:**

**Material:**
Insulator: PBT, glass filled, rated UL94V-0
Insulator Color: Black
Contacts: Phosphor Bronze or Brass
Shield: Copper Alloy, Nickel or Tin plated

**Contact Plating:**
Gold over Nickel underplate on contact area, Tin over Copper underplate on solder tails.

**ELECTRICAL:**
Operating Voltage: 150V AC
Current Rating: 1.5 Amps Max.
Contact Resistance: 20 mΩ Max.
Insulation Resistance: 500 MΩ Min.
Dielectric Withstanding Voltage: 1500V AC for 1 Minute
DC resistance: 1.2 Ohms Max.
Interwinding capacitance: 35pF @ 1MHz
Insertion loss: 100KHz to 80MHz = -1.1dB Min.
Return loss: 1MHz to 30MHz = -18dB Min.
30MHZ to 80MHz = -12dB Min.
Rise time: 30nS Max.
Cross talk: 1MHz to 100MHz = 40dB TYP.
Common to Common mode Attenuation: 35dB TYP.

**MECHANICAL:**
Insertion force: 8 Contacts: 22.5N
10 Contacts: 24.5N

**TEMPERATURE RATING:**
Operation Temperature: -40°C ~ +85°C

**PACKAGING:**
Anti-ESD plastic trays or tubes

**SAFETY AGENCY APPROVALS:**
UL Recognized & CSA Certified, File no. E224049

COMPLIANT HI-TEMP INSULATOR AVAILABLE

## MAGNETICS TELEPHONE JACK ORDERING INFORMATION

| MTJ | 8 | 8 | C | X | 1 | FSD | LD | M5 |
|---|---|---|---|---|---|---|---|---|

**SERIES INDICATOR**
**MTJ** = Modular Telephone Jack

**HOUSING PLUG SIZE**
8 or 10

**NO. OF CONTACT POSITIONS FILLED**
8 or 10

**HOUSING TYPE**
**C** = Tab Up, Extended Body
**S** = Tab Up, Standard Body
**T** = Tab Down, Short Body

**PLATING**
**X** = Gold Flash
**0** = 15 µin gold
**1** = 30 µin gold
**2** = 50 µin gold

**BODY COLOR**
**1** = Black

**SHIELD PIN LOCATION OPTION**
**FSD** or **FSP**
(See drawing on page 41)

**LED**
**LX** = Led Color (See Chart on page 43)
**RLX** = Led with Resistor

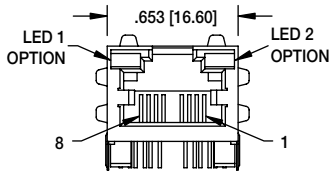
**TRANSFORMER TYPE M1** Thru **M20**
(See page 44-45)
Consult Factory if transformer type required is not shown

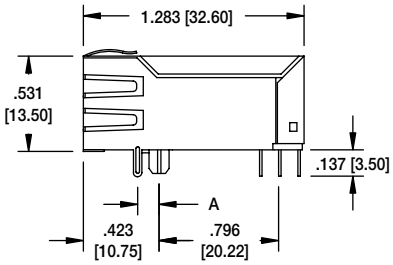
**OPTIONS:**
Add designator(s) to end of part number
**HT** = Hi-Temp insulator for Hi-Temp soldering processes up to 260°C
**PG** = Panel ground tabs

# INTEGRATED MAGNETICS JACK

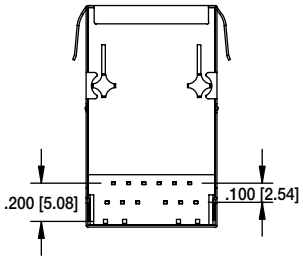
## INTEGRATED MAGNETICS & LEDs
## 10/100 BASE T & 1000 BASE T

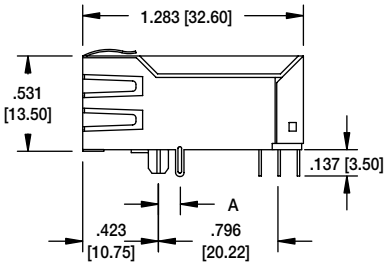
### TYPE C
**TAB UP & TOP LEDs, EXTENDED BODY**



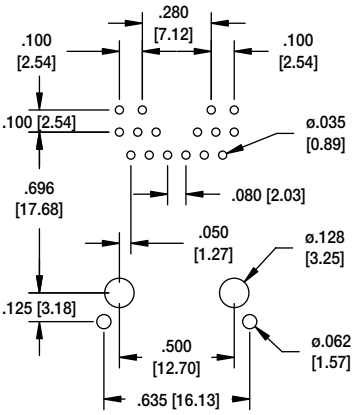



MTJ-88CX1-FSP-PG-LG-M3



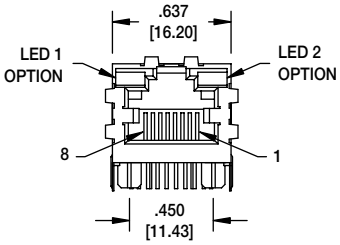

SHIELD PIN LOCATION DIM. A
FSD DIMENSION: A = .120 [3.05]
FSP DIMENSION: A = .125 [3.17]

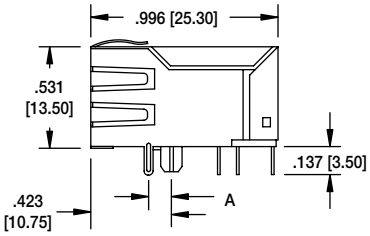



Recommended PCB Layout
FSP Option Shown

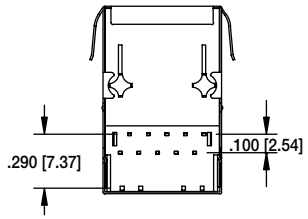
AVAILABLE WITH MAGNETIC TRANSFORMERS: M1, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M13, M16 & M20.

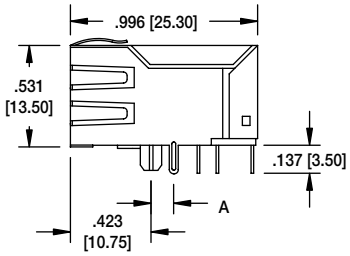
### TYPE S
**TAB UP & TOP LEDs, STANDARD BODY**



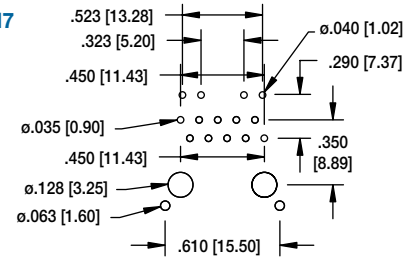



MTJ-88SX1-FSP-PG-LG-M7



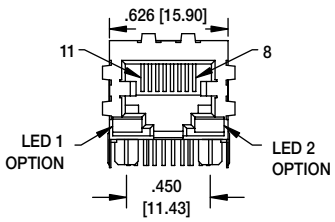

SHIELD PIN LOCATION DIM. A
FSD DIMENSION: A = .120 [3.05]
FSP DIMENSION: A = .125 [3.17]

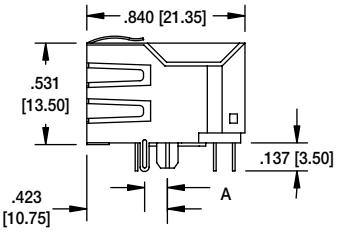



Recommended PCB Layout
FSP Option Shown

AVAILABLE WITH MAGNETIC TRANSFORMERS: M1, M3, M4, M5, M6, M7, M9, M10, M11, M12 & M13. See pgs. 44-45

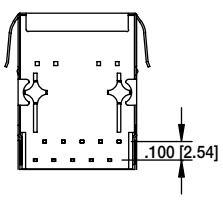
### TYPE T
**TAB DOWN & BOTTOM LEDs, SHORT BODY**

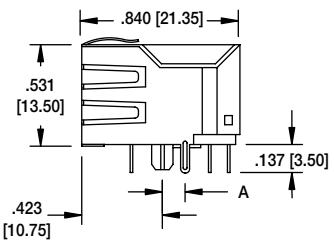


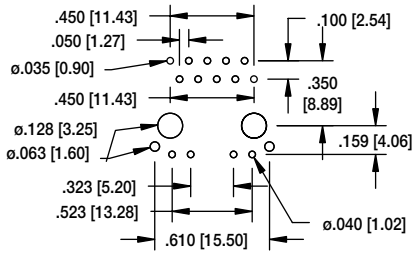
MTJ-88TX1-FSP-PG-LG-M5

Tab Up Type also available




SHIELD PIN LOCATION DIM. A
FSD DIMENSION: A = .120 [3.05]
FSP DIMENSION: A = .125 [3.17]




Recommended PCB Layout
FSP Option Shown

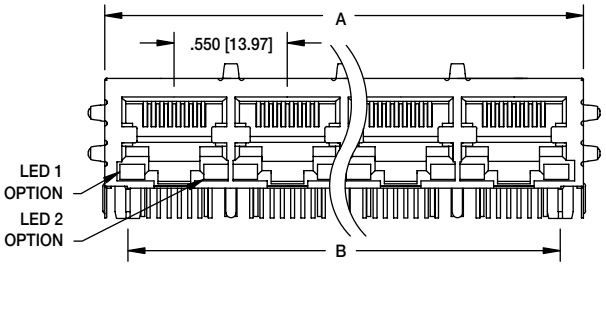
AVAILABLE WITH MAGNETIC TRANSFORMERS: M1, M3, M4, M5, M6, M7, M9, M10, M11, M12 & M13. See pgs. 44-45

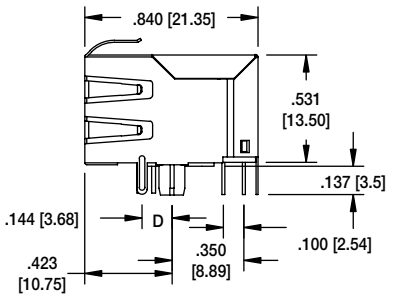
# INTEGRATED MAGNETICS JACK

## WITH INTEGRATED MAGNETICS & LEDs
## 10/100 BASE T & 1000 BASE T

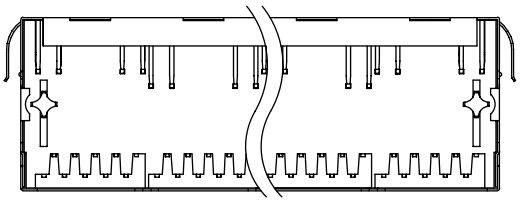
Ordering Information pg. 40

### TYPE T
TAB DOWN, SHORT BODY
MAGNETICS & LEDs
2, 4 & 5 PORTS GANGED

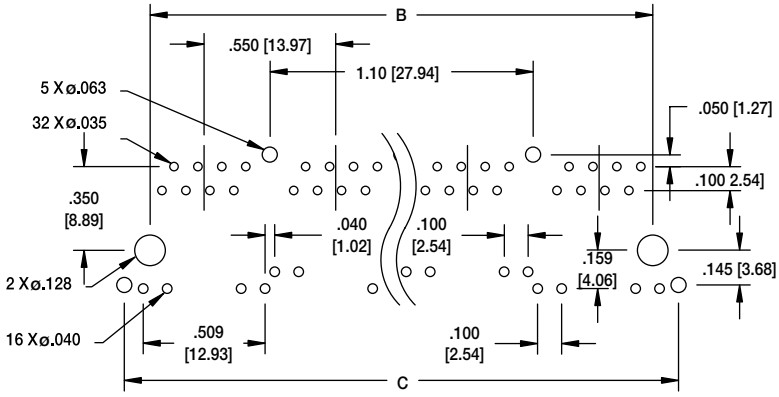



"D" DIM.
FSA = .170 [4.32]
FSB = .144 [3.65]
FSG = .180 [4.57]
FSE = .120 [3.05]



**MTJG-4-88TX1-FSB-PG**
Drawing shown with metal shield, panel ground tabs, LEDs and magnetics option

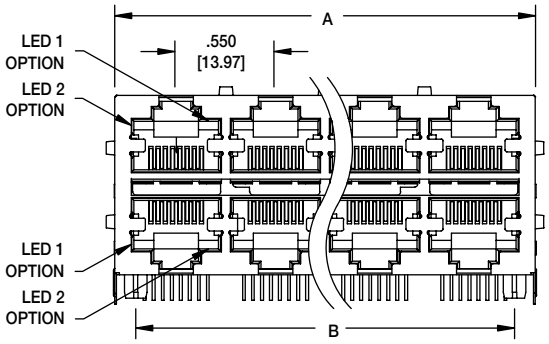


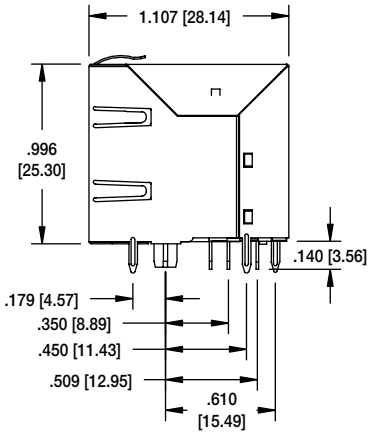

Recommended PCB Layout

A = .550 [13.97] X (NO OF PORTS -1) + .679 [17.27]
B = .550 [13.97] X (NO OF PORTS -1) + .450 [11.43]

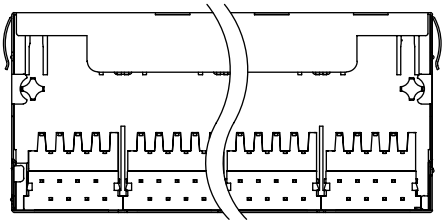
AVAILABLE WITH MAGNETIC TRANSFORMERS: M1, M3, M4, M5, M6, M7, M9, M10, M11, M12 & M13. See pgs. 44-45

### TYPE J
STACKED

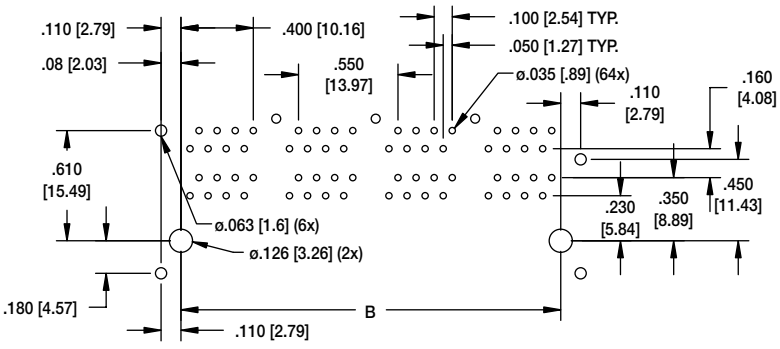



| DIMENSIONS | | |
|---|---|---|
| PORTS | A | B |
| 2 X 1 | .677 [17.20] | .450 [11.43] |
| 2 X 2 | 1.227 [31.17] | 1.00 [25.40] |
| 2 X 4 | 2.331 [59.22] | 2.100 [53.34] |
| 2 X 5 | 2.876 [73.07] | 2.650 [67.31] |
| 2 X 6 | 3.426 [87.04] | 3.200 [81.28] |
| 2 X 8 | 4.527 [115.00] | 4.300 [109.22] |



**MTJG-8-88JX1-FSE-LD-M1**
Drawing shown with metal shield, panel ground tabs & LEDs.



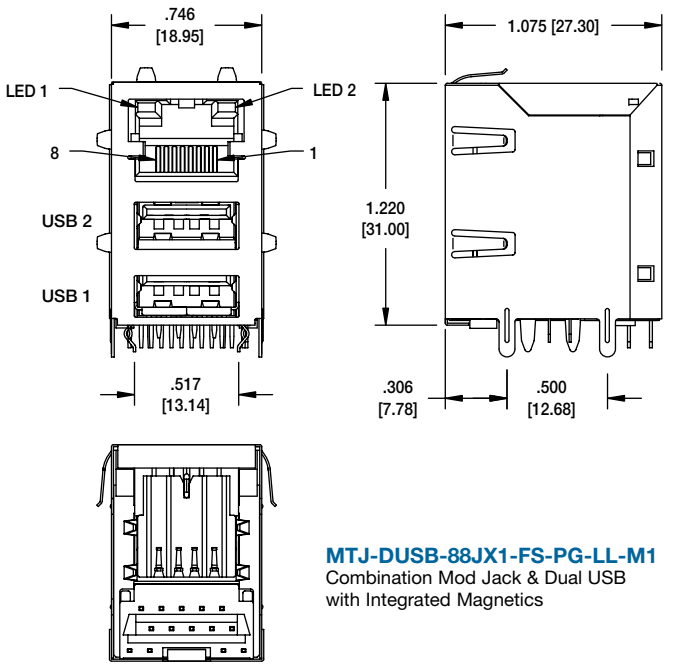

Recommended PCB Layout

AVAILABLE WITH MAGNETIC TRANSFORMERS: M1, M3, M4, M5, M6, M7, M9, M10, M11, M12 & M13. See pgs. 44-45

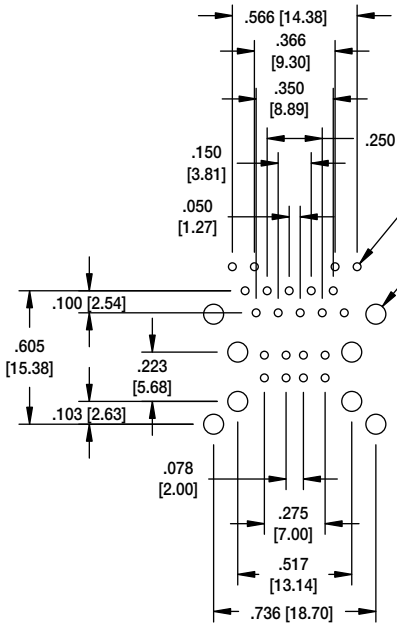
# INTEGRATED MAGNETICS JACK

## WITH INTEGRATED MAGNETICS & LEDs
## 10/100 BASE T & 1000 BASE T

**COMBINATION MOD JACK & DUAL USB WITH INTEGRATED MAGNETICS**




**MTJ-DUSB-88JX1-FS-PG-LL-M1**
Combination Mod Jack & Dual USB
with Integrated Magnetics




**Recommended PCB Layout**

| LED CONFIGURATION (Add suffix to end of part no.) | | |
|---|---|---|
| SUFFIX | LED 1 | LED 2 |
| LA | YELLOW | YELLOW |
| LD | GREEN | GREEN |
| LG | YELLOW | GREEN |
| LH | GREEN | YELLOW |
| LI | ORANGE/GREEN | ORANGE/GREEN |
| LP | YELLOW/GREEN | YELLOW/GREEN |
| LQ | YELLOW/GREEN | — |
| L11 | RED | GREEN |

OTHER LED COLOR COMBINATIONS AVAILABLE

| LED SPECIFICATION | | | |
|---|---|---|---|
| STANDARD LED | WAVE LENGTH | FORWARD VOLT / CURRENT | TYP |
| GREEN | 565 nm | 5.5V / 20mA | 5.0V |
| YELLOW | 590 nm | 5.5V / 20mA | 5.0V |
| ORANGE | 610 nm | 5.5V / 20mA | 5.0V |
| RED | 637 nm | 5.5V / 20mA | 5.0V |

AVAILABLE WITH MAGNETIC TRANSFORMERS M1, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12,M13, M16 & M20
See Pgs 44-45:

## ORDERING INFORMATION FOR JACKS WITH INTEGRATED MAGNETICS & LEDs

| MTJG | 4 | 8 | 8 | T | X | 1 | FSD | LD | M5 |
|---|---|---|---|---|---|---|---|---|---|

**SERIES INDICATOR**
**MTJG** = Magnetics Ganged Jack

**NO. OF PORTS**
2 thru 8

**HOUSING PLUG SIZE**
8 or 10

**NO. OF CONTACT POSITIONS FILLED**
8 or 10

**HOUSING TYPE**
T or J

**PLATING**
**X** = Gold Flash
**0** = 15 µin gold
**1** = 30 µin gold
**2** = 50 µin gold

**BODY COLOR**
**1** = Black

**SHIELD PIN LOCATION**
**FSD** thru **FSH**
(See drawing on page 40)

**LED**
**LX** = Led Color
**RLX** = Led with Resistor

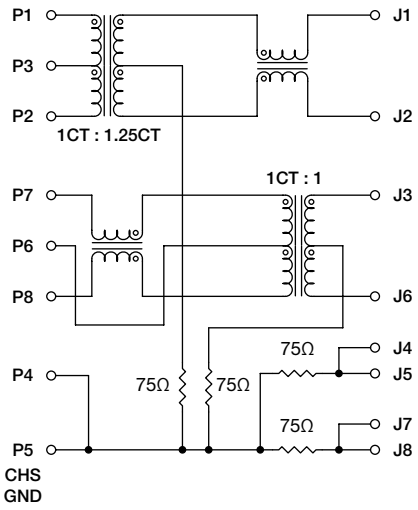
**TRANSFORMER**
**M1** Thru **M20**
(See page 44-45)
Consult Factury for transformer types not shown

**OPTIONS:**
Add designator(s) to end of part number
**HT** = Hi-Temp insulator for Hi-Temp soldering processes up to 260°C
**PG** = Panel ground tabs

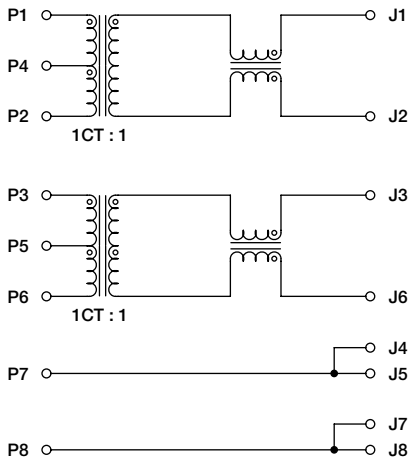
# INTEGRATED MAGNETICS JACK

## MAGNETIC TRANSFORMER TYPES
## 10/100 BASE T & 1000 BASE T

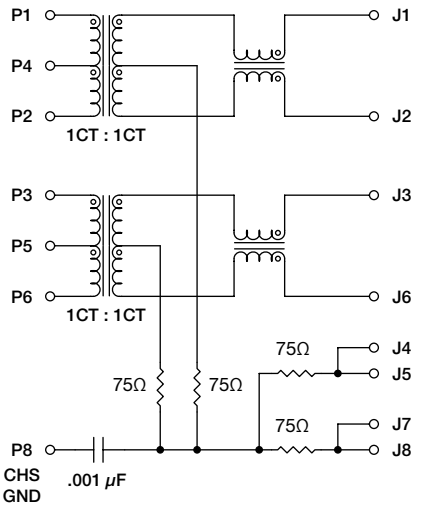
### M1



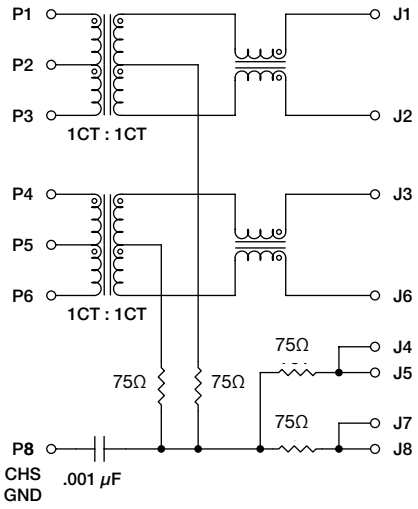

### M3



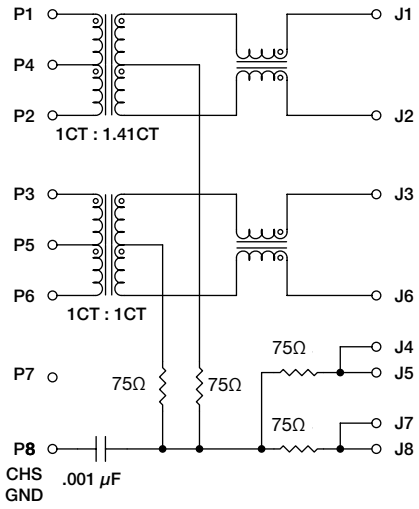

### M4



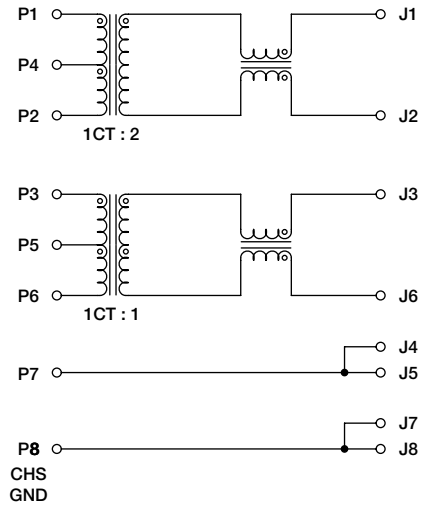

### M5



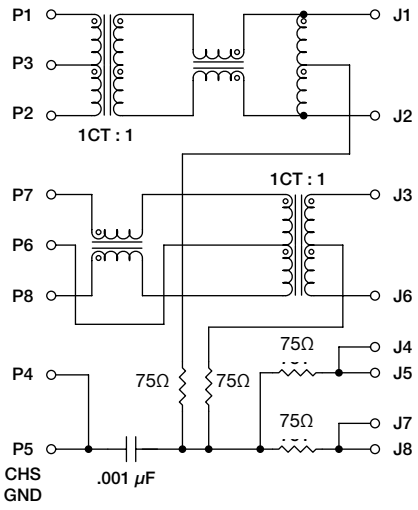

### M6



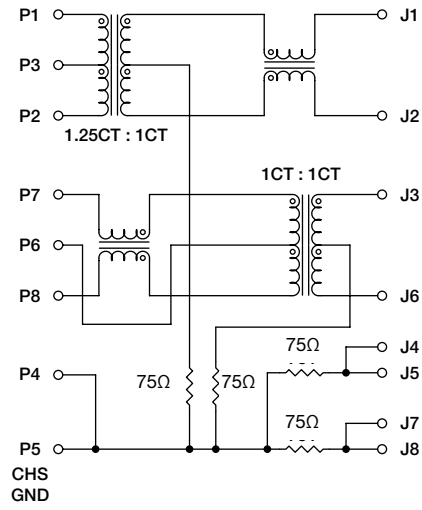

### M7



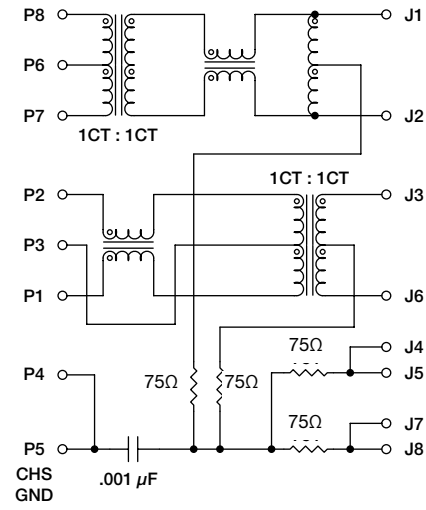

### M8




### M9



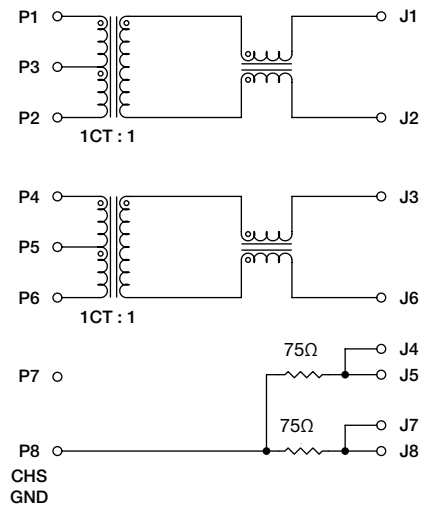

### M10



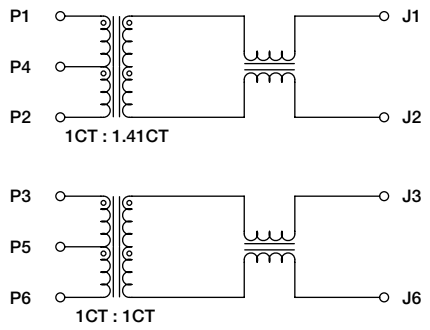
# INTEGRATED MAGNETICS JACK

## MAGNETIC TRANSFORMER TYPES
## 10/100 BASE T & 1000 BASE T

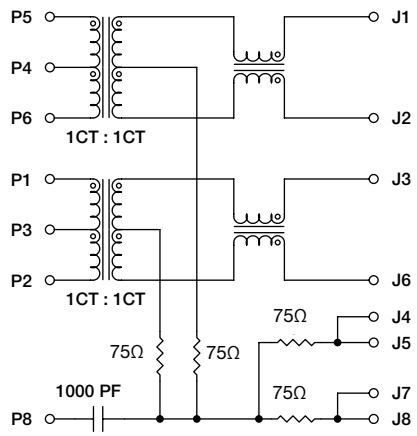
### M11



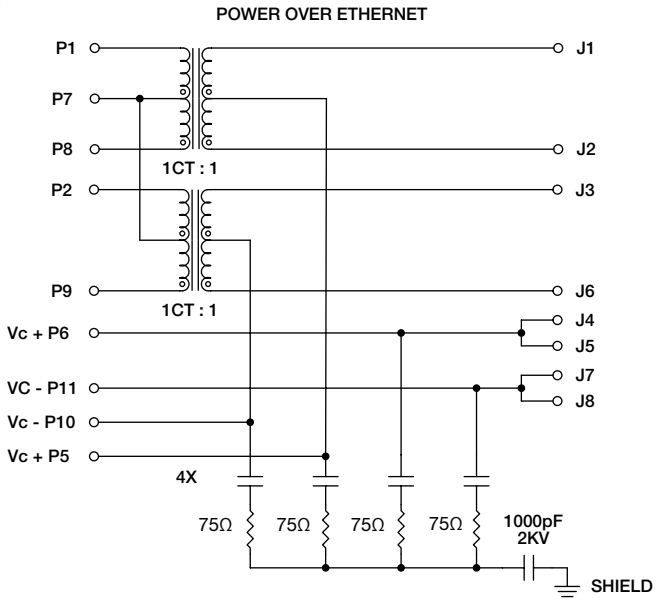

### M12



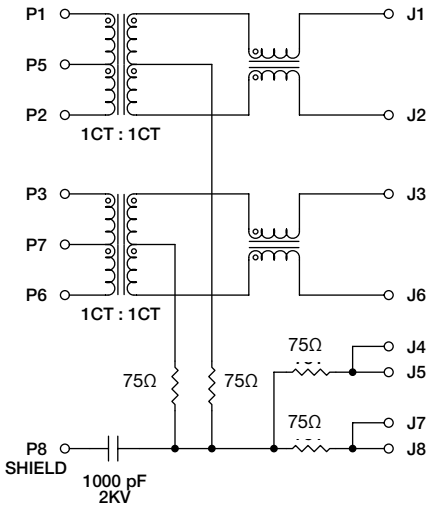

### M13



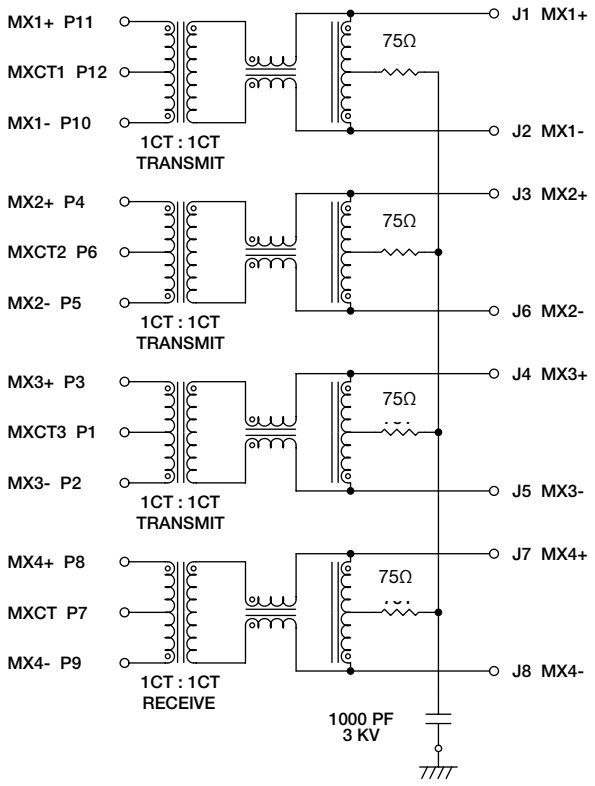

### M16




### M19




### M20



# WIRE LEADED JACKS
## HANDSET & PANEL MOUNT
MTJP SERIES

**INTRODUCTION:**
Adam Tech MTJP Series Wire Leaded Handset and Panel Jacks are conveniently prepared with wire leads ready for final assembly. This series has a multitude of housing shapes to fit many specific applications. They are offered in 4, 6 & 8 positions with choice of Stripped and Tinned leads or leads with Spade Terminals, Adam Tech Jacks are UL and CSA approved and meet all required FCC rules and regulations.

**FEATURES:**
UL & CSA approved
FCC compliant to No. 47 CFR part 68
Prepared for Final Assembly
4P, 6P and 8P versions
Custom Jacks available

**MATING PLUGS:**
All industry standard line cords manufactured with telephone plugs

**SPECIFICATIONS:**

**Material:**
Insulator: ABS, (Nylon 66 optional), rated UL94V-0
Insulator Colors: Medium gray or black
Contacts: Phosphor Bronze
Wires: 26 Awg, UL-1061, 80°C, VW-1, 300V.

**Contact Plating:**
Gold over Nickel underplate on contact area.

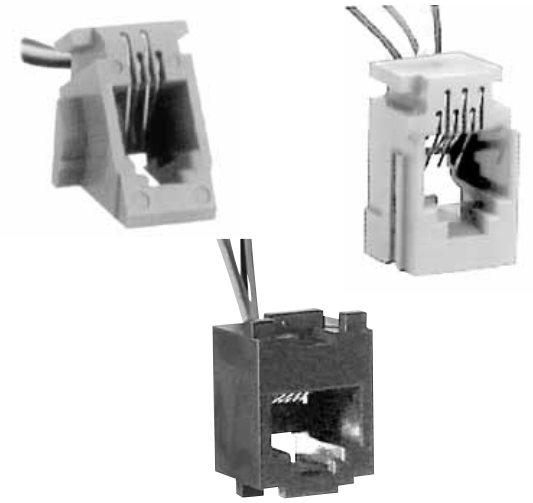
**Electrical:**
Operating voltage: 150V AC max.
Current rating: 1.5 Amps max.
Contact resistance: 20 mΩ max. initial
Insulation resistance: 500 MΩ min.
Dielectric withstanding voltage: 500V AC for 1 minute

**Mechanical:**
Insertion force: 4 Contacts: 500g, 6 contacts 750g
8 contacts: 900g, 10 contacts: 1000g
Durability: 500 Cycles min.

**Temperature Rating:**
Operating temperature: -40°C to +85°C

**PACKAGING:**
Anti-ESD plastic bags

**APPROVALS AND CERTIFICATIONS:**
UL Recognized & CSA Certified, File no. E224049



## ORDERING INFORMATION
## WIRE LEADED JACKS

| MTJP | 623K6 | 2 | A1 | 2 |
|---|---|---|---|---|

**SERIES INDICATOR**
**MTJP** = Wire Leaded Jack

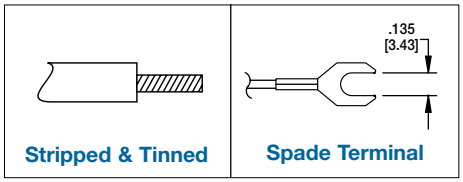
**HOUSING TYPE**
616B, 616E, 616L, 616M, 616P, 616W, 623K4, 623K6, 623P4, 623P6, 623T4, 623T6, 648K4, 648K6, 641

**CONTACT PLATING**
X = Gold Flash
0 = 15 µin. gold
1 = 30 µin. gold
2 = 50 µin. gold

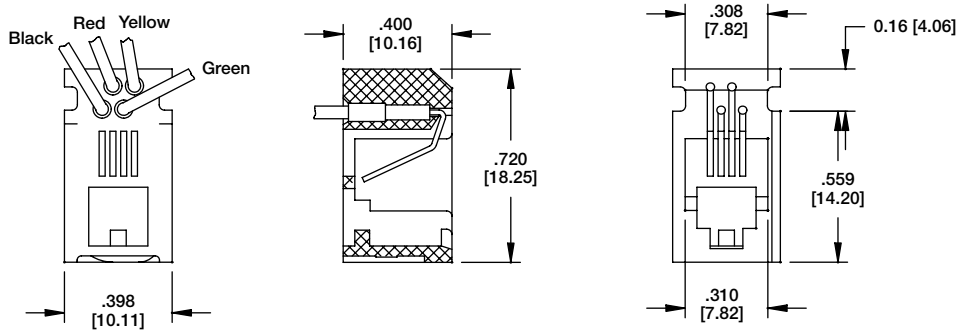
**WIRE LEAD TYPE**
**A1** = 7" Wire leads, stripped 1/4" and tinned
**A2** = 7" Wire leads, with spade terminal

**HOUSING COLOR**
**1** = Black
**2** = Medium Gray

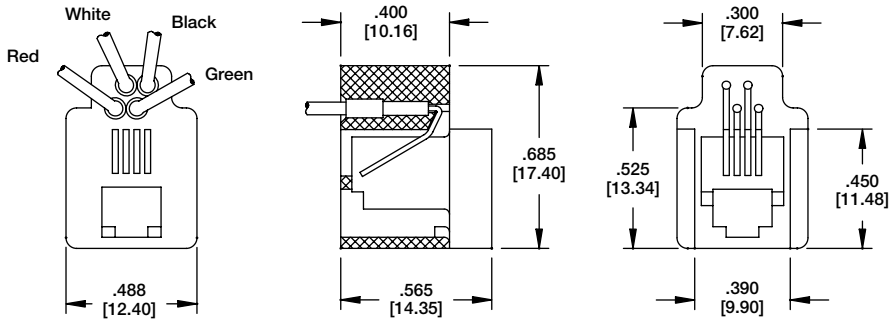
Wire Lead Options



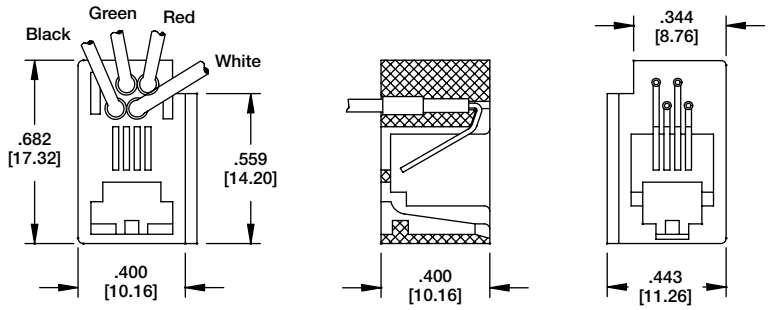
### MTJP-616L

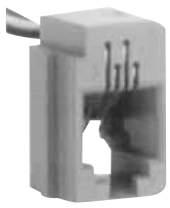


### MTJP-616M

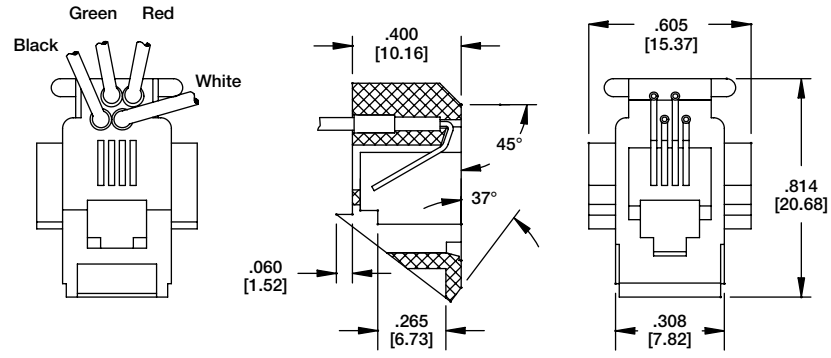


### MTJP-616E



### MTJP-616W

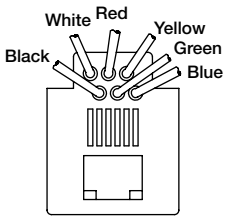


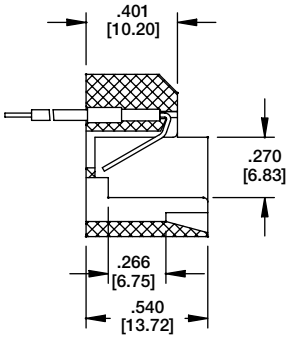
# WIRE LEADED JACKS

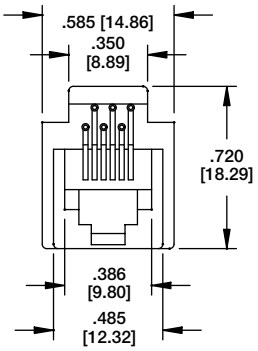
## HANDSET & PANEL MOUNT

MTJP SERIES

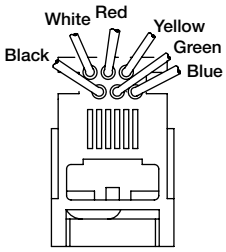
### MTJP-623K4
### MTJP-623K6

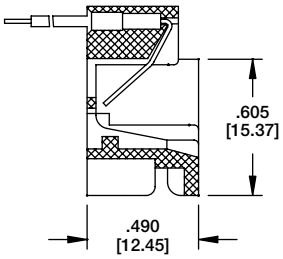


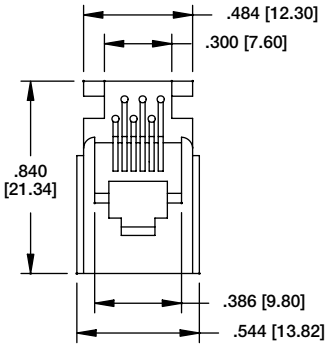



### MTJP-623P4
### MTJP-623P6



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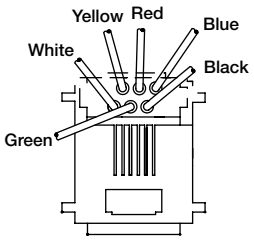


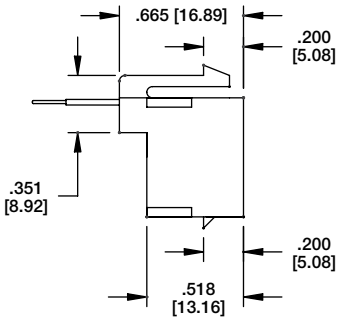


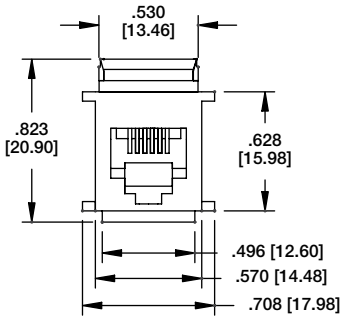

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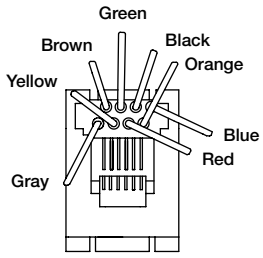
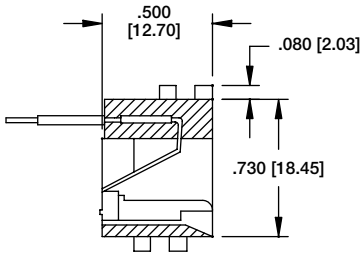
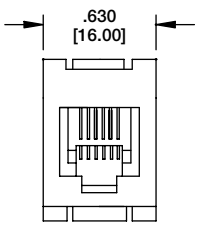
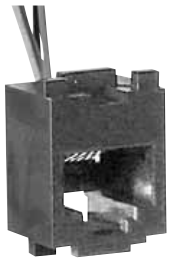
### MTJP-641



## ORDERING INFORMATION

| MTJC | 8 | 6 | 0 | B |
|---|---|---|---|---|

**SERIES INDICATOR**
**MTJC** = Modular Jack Coupler

**HOUSING SIZE** = 8

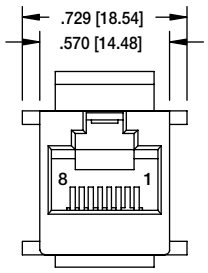
**POSITIONS FILLED**
4, 6, or 8

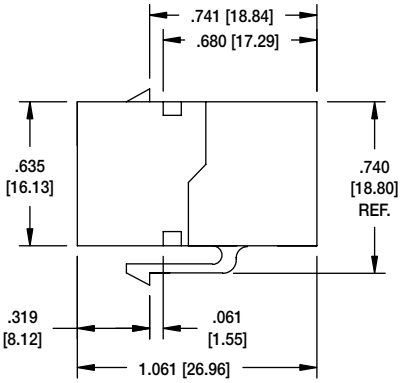
**PLATING**
**X** = Gold Flash
**0** = 15 µin gold
**1** = 30 µin gold
**2** = 50 µin gold

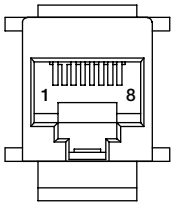
**INSULATOR COLOR**
**B** = Black
**W** = White
**IV** = Ivory
**GY** = Gray
**Y** = Yellow
**R** = Red
**G** = Green
**BL** = Blue

**OPTIONS:**
Add designator to end of part number
**S** = Shielded

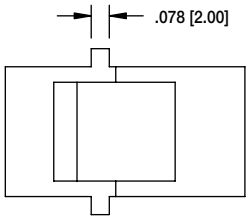
### MTJC-88-XB
### PLASTIC HOUSING

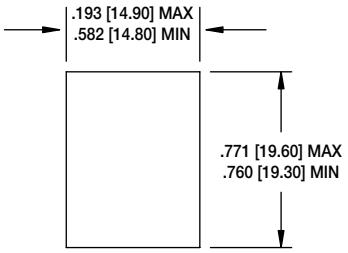


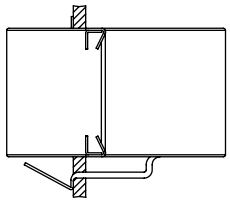
MTJC-88XIV



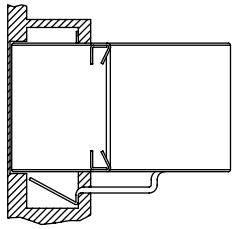




**RECOMMENDED PANEL CUT-OUT**
**PANEL THICKNESS .062 [1.57]**

MTJC Couplers can used in either of the following mounting applications

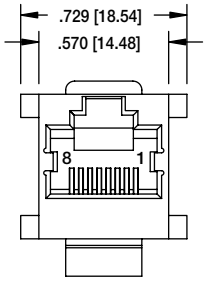


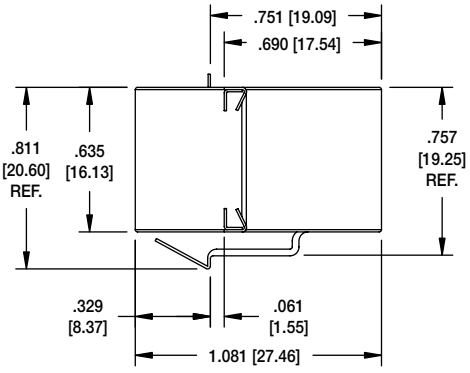
Single Wall Plate Mounting

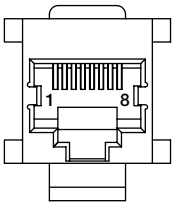


Double Wall Plate Mounting

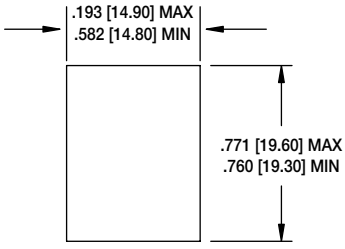
### MTJC-88-XBS
### METAL SHIELDED



MTJC-88XB-S




**RECOMMENDED PANEL CUT-OUT**
**PANEL THICKNESS .062 [1.57]**