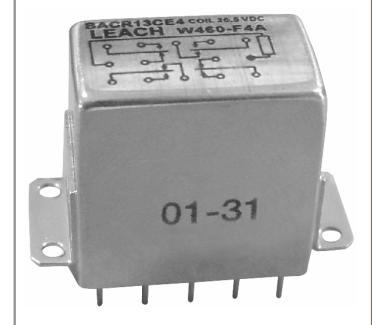
# **WN460**

### **ENGINEERING DATA SHEET**

RELAY - NONLATCH 4 PDT. 2 AMP



Non polarized, non latching hermetically sealed relay.

Contact arrangement 4 PDT

Coil supply Direct current
Compatible with MIL-R-39016/39

#### PRINCIPLE TECHNICAL CHARACTERISTICS

Contacts rated at 2 Amp / 28Vdc Weight 34 grams max

Dimensions of case 25.65mm x 15.5m x 25.4mm max

without mounting brackets

Hermetically sealed corrosion protected metal can.

**APPLICATION NOTE:** 

<u>001</u>

**APPLICABLE SOCKETS:** 

**HRCC** 

#### CONTACT ELECTRICAL CHARACTERISTICS

Minimum operating cycles	Contact rating per pole and load type	Load Current in Amps		
		@28Vdc	@115Vac/60-400Hz	
100,000 cycles 100,000 cycles	Relay case grounded: resistive load inductive load (0.2H)	2 0.25	0.25 -	
100,000 cycles 100,000 cycles 100,000 cycles	Relay case not grounded: resistive load inductive load (0.2H) lamp load	- 0.5 0.25	1	
1,000,000 cycles	low level (50µA/50mV max)	-	-	
100 cycles	resistive overload	4	-	



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Data sheets are for initial product selection and comparison. Contact Esterline Power Systems prior to choosing a component.

# **COIL CHARACTERISTICS (Vdc)**

## **WN460**

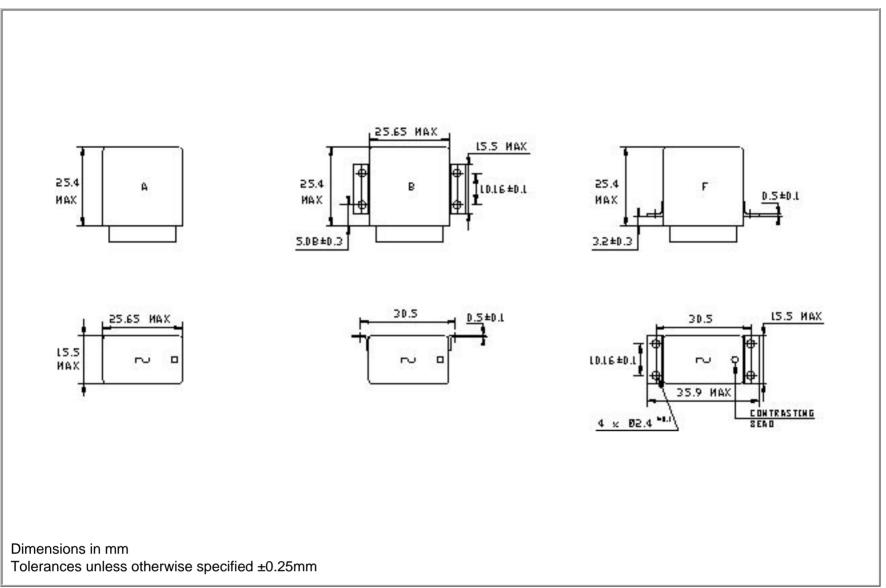
CODE	A	В	С
Nominal operating voltage	26.5	12	6
Maximum operating voltage	32	16.5	8.5
Maximum pickup voltage at +125° C	18	8.8	4.55
Guaranteed drop-out voltage at -65° C	1	0.5	0.25
Coil resistance in Ω ±10% at +25° C	500	117	32

# **GENERAL CHARACTERISTICS**

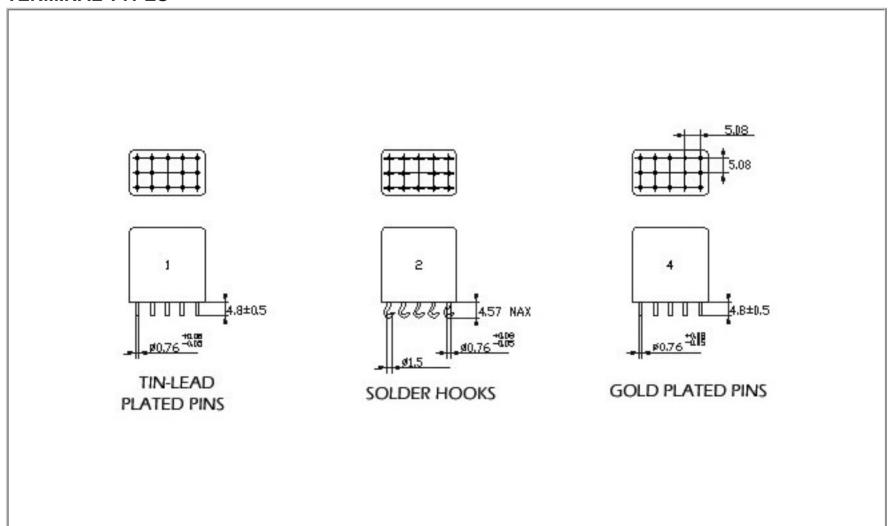
Temperature range	-65°C to +125°C
Dielectric strength at sea level -between case, frame or enclosure and coil -between open contacts -others	500 Vrms / 50 Hz 500 Vrms / 50 Hz 1000 Vrms / 50 Hz
Dielectric strength at altitude 25,000 m, all terminals to ground	350 Vrms / 50 Hz
Initial insulation resistance at 100 Vdc	>1000 M Ω
Sinusoidal vibration	30 G / 10 to 3000 Hz
Shock	50 G / 11 ms
Maximum contact opening time under vibration and shock	10 µs
Operate time at nominal voltage	6 ms max
Release time	5 ms max
Bounce time	2 ms max
Contact resistance at nominal current -initial value -after life	50 m $\Omega$ max 100 m $\Omega$ max

Date of issue: 07/10 - 42 - Page 2 of 4

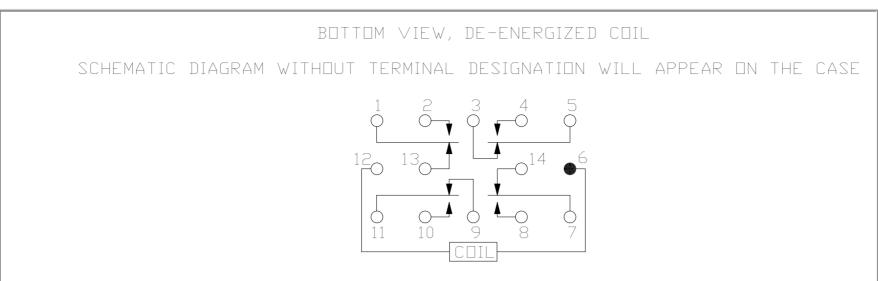
MOUNTING STYLES WN460



## **TERMINAL TYPES**



SCHEMATIC DIAGRAM WN460



### **NUMBERING SYSTEM**

	WN460-*	*	*	
Basic series designation				
1-Mounting Style (A,B,F)				
2-Terminal Types(1,2,4)				
3-Coil Voltage (A,B,C,				

## **NOTES**

1. Ultra sonic cleaning may adversely effect the normally closed contacts

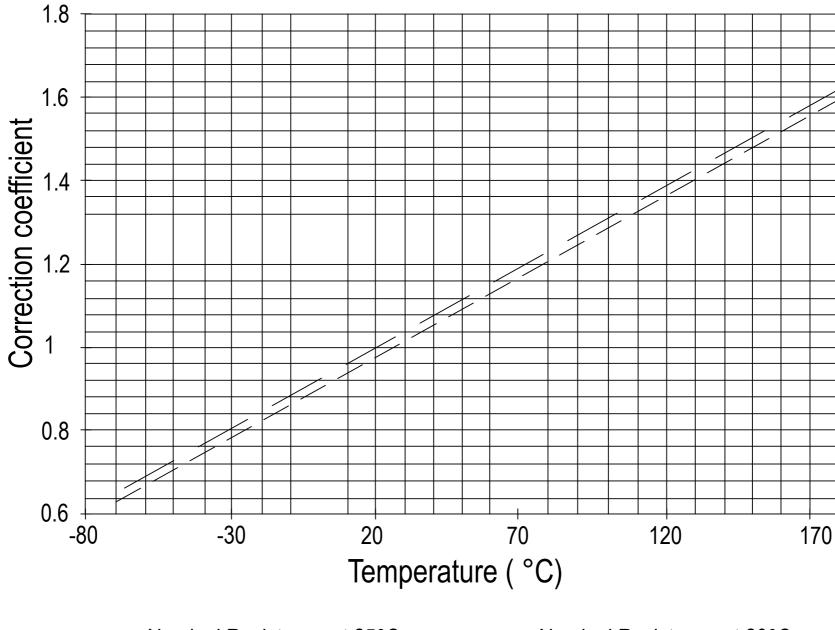
### **TYPICAL CHARACTERISTICS**

- Coil L/R ratio for all coil = 1.5 ms
- Coil resistance/temperature change: See application note no. 001

Date of issue: 07/10 - 44 - Page 4 of 4

Application notes N°001

# CORRECTION DUE TO COIL COPPER WIRE RESISTANCE CHANGE IN TEMPERATURE



— — Nominal Resistance at 25°C — — Nominal Resistance at 20°C

Example: Coil resistance at 25°C: 935 ohms. What is it at 125°C?

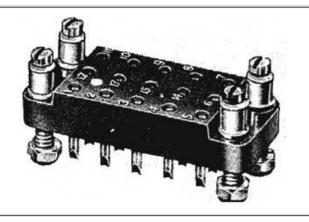
Correction coefficient on diagram is: 1.39 at 125°C. R becomes: 935x1.39=1299 Ohms

Correction also applies to operating voltages

## **ENGINEERING DATA SHEET**

**HRCC** 

RELAY SOCKET 2 AMP



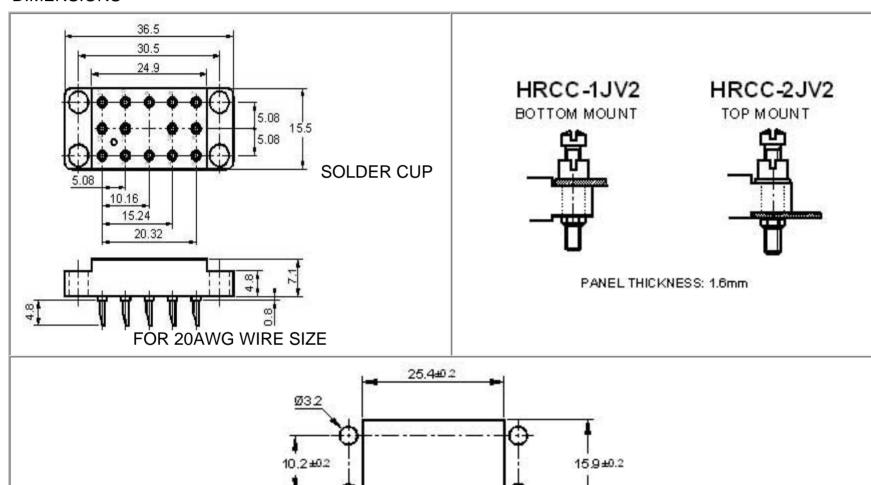
BASIC SOCKET SERIES DESIGNATION FOR:

#### **SERIES WN460**

MEETS THE REQUIREMENTS OF:

MIL-S-12883

#### **DIMENSIONS**



# **GENERAL CHARACTERISTICS**

Supplied with mounting hardware.		
Temperature range	-65°C to +125°C	
Weight	16 grams	
Dielectric Strength at sea level	1500 Vrms / 50 Hz Minimum	
Gold plated contact per MIL-G-45204		
Dallyl phthalate, glass-fiber filled per MIL-M-14		

30.5±0.2



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