

FPD MODEL TABLE

SPECIFICATION	OUTPUT VOLTS	OVP SETTING VOLTS	OUTPUT CURRENT AMPS	OVER CURRENT SETTING	NOMINAL INPUT VOLTS
5 WATT MODELS(1), 20-56 VOLT INPUT					
FPD 5-1-48W	5	5.5-6.9	1.0	1.20-2.0 ⁽²⁾	24-48
FPD 12-0.4-48W	12	13.2-15.7	0.4	0.48-0.8 ⁽²⁾	24-48
FPD 15-0.35-48W	15	16.5-19.0	0.35	0.42-0.7 ⁽²⁾	24-48
FPD 24-0.2-48W	24	26.4-31.5	0.2	0.24-0.4 ⁽²⁾	24-48
10 WATT MODELS(1), 20-56 VOLT INPUT					
FPD 5-2-48W	5	5.5-6.9	2.0	2.4-4.0 ⁽²⁾	24-48
FPD 12-0.8-48W	12	13.2-15.7	0.8	1.0-1.6 ⁽²⁾	24-48
FPD 15-0.65-48W	15	16.5-19.0	0.65	0.8-1.3 ⁽²⁾	24-48
FPD 24-0.4-48W	24	26.4-31.5	0.4	0.5-0.8 ⁽²⁾	24-48
10 WATT MODELS(1), 36-72 VOLT INPUT					
SINGLE OUTPUT					
FPD 5-2-60W	5	5.4-7.0	2.0	3.0-5.2 ⁽³⁾	48-60
FPD 12-0.8-60W	12	12.6-16.0	0.8	1.5-2.5 ⁽³⁾	48-60
FPD 15-0.65-60W	15	15.75-19.0	0.65	1.25-2.4 ⁽³⁾	48-60
DUAL OUTPUT					
FPD 2X12-60W	+ 12, - 12	±13.2-18.0	±0.4	1.2-2.5 ⁽³⁾	48-60
FPD 2X15-60W	+ 15, - 15	±16.5-21.0	±0.32	1.1-2.4 ⁽³⁾	48-60

(1) W = wide range input.

(2) Fold back/winker type current limit.

(3) Square-type current limit.

FPD MODEL TABLE

SPECIFICATION	OUTPUT VOLTS	OVP SETTING VOLTS	OUTPUT CURRENT AMPS	OVER CURRENT SETTING	NOMINAL INPUT VOLTS
50 WATT MODELS					
FPD 5-10-12	5	5.5-6.9	10.0	10.3-13.5A ⁽³⁾	12
FPD 12-4.2-12	12	13.2-15.7	4.2	4.3-5.7A ⁽³⁾	12
FPD 15-3.4-12	15	17.0-19.0	3.4	3.5-4.5A ⁽³⁾	12
FPD 24-2.1-12	24	27.0-30.5	2.1	2.2-2.9A ⁽³⁾	12
50 WATT MODELS					
FPD 5-10-24	5	5.5-6.9	10.0	10.3-13.5A ⁽³⁾	24
FPD 12-4.2-24	12	13.7-15.7	4.2	4.3-5.7A ⁽³⁾	24
FPD 15-3.4-24	15	17.0-19.0	3.4	3.5-4.5A ⁽³⁾	24
FPD 24-2.1-24	24	27.0-30.5	2.1	2.2-2.9A ⁽³⁾	24
50 WATT MODELS					
FPD 5-10-48	5	5.5-6.9	10.0	10.3-13.5A ⁽³⁾	48
FPD 12-4.2-48	12	13.7-15.7	4.2	4.3-5.7A ⁽³⁾	48
FPD 15-3.4-48	15	17.0-19.0	3.4	3.5-4.5A ⁽³⁾	48
FPD 24-2.1-48	24	27.0-30.5	2.1	2.2-2.9A ⁽³⁾	48
50 WATT MODELS					
FPD 5-10-150	5	5.5-6.9	10.0	10.3-13.5A ⁽³⁾	150
FPD 12-4.2-150	12	13.7-15.7	4.2	4.3-5.7A ⁽³⁾	150
FPD 15-3.4-150	15	17.0-19.0	3.4	3.5-4.5A ⁽³⁾	150
FPD 24-2.1-150	24	27.0-30.5	2.1	2.2-2.9A ⁽³⁾	150
100 WATT MODELS					
FPD 5-20-24	5	5.5-6.9	20.0	20.6-27A ⁽³⁾	24
FPD 12-8.3-24	12	13.7-15.7	8.3	8.5-11.2A ⁽³⁾	24
FPD 15-6.6-24	15	17.0-19.0	6.6	6.8-8.9A ⁽³⁾	24
FPD 24-4.2-24	24	27.0-30.5	4.2	4.3-5.7A ⁽³⁾	24
100 WATT MODELS					
FPD 5-20-48	5	5.5-6.9	20.0	20.6-27A ⁽³⁾	48
FPD 12-8.3-48	12	13.7-15.7	8.3	8.5-11.2A ⁽³⁾	48
FPD 15-6.6-48	15	17.0-19.0	6.6	6.8-8.9A ⁽³⁾	48
FPD 24-4.2-48	24	27.0-30.5	4.2	4.3-5.7A ⁽³⁾	48
100 WATT MODELS					
FPD 5-20-150	5	5.5-6.9	20.0	20.6-27A ⁽³⁾	150
FPD 12-8.3-150	12	13.7-15.7	8.3	8.5-11.2A ⁽³⁾	150
FPD 15-6.6-150	15	17.0-19.0	6.6	6.8-8.9A ⁽³⁾	150
FPD 24-4.2-150	24	27.0-30.5	4.2	4.3-5.7A ⁽³⁾	150

(1) W = wide range input.

(2) Fold back/winker type current limit.

(3) Square-type current limit.

FPD INPUT CHARACTERISTICS

NOMINAL	RANGE	NOMINAL	RANGE
12V	9-18V	48V "W"	20-56V
24V	20-30V	60V "W"	36-72V
48V	40-56V	150V	110-165V
EFFICIENCY			
VOLTS	POWER	EFFICIENCY	FREQUENCY
12	50W	78% typ	300KHz
24	50W	81% typ	450KHz
24	100W	80% typ	450KHz
48	50W	80% typ	550KHz
48	100W	80% typ	550KHz
48 "W" Wide-range input (20-56)	5W	75% at 24V 71% at 48V	700KHz
	10W	80% at 24V 76% at 48V	700KHz
60 "W" Wide-range input (36-72)	10W	80% at 5V	100KHz min
	10W	83% at 12, 15V	100KHz min
150	50W	80% typ	500KHz
150	100W	80% typ	500KHz

FPD OUTPUT CHARACTERISTICS

SPECIFICATION	TYP	MAX	CONDITION			
ALL MODELS EXCEPT 10W (36-72V) SINGLE/DUAL OUTPUT MODELS						
Source Effect	1%	2%	(min-max)			
Load Effect	1%	2%	(10%-100%)			
Temperature Effect	1%	2%	(0-71°C)			
Combined Effect	3%	6%	source, load, temp			
Time Effect	0.1%	0.2%	0.5-8hrs, 25°C			
10 WATT (36-72V) INPUT MODELS						
SINGLE OUTPUT						
Source Effect	0.05%	0.2%	(min-max)			
Load Effect	0.05%	0.2%	(10%-100%)			
Temperature Effect	0.3%	1.5%	(0-71°C)			
Combined Effect	0.4%	1.9%	source, load, temp			
Time Effect	0.1%	0.1%	0.5-8hrs, 25°C			
DUAL OUTPUT						
Combined Effect	(± 12V) 10.8-13.2**		(± 15V) 13.5-16.5**			
RIPPLE						
Volts	Switching Frequency mV p-p			Spike mV p-p	Output Volts	Switching Frequency mV p-p* 10W, 36-72 input
	5W	10W	50-100W			
5V	100	200	150	250	5V	70
12V	200	200	200	300	12V & 15V	100
15V	200	200	200	300	±12V & ± 15V	300
24V	300	300	200	400		

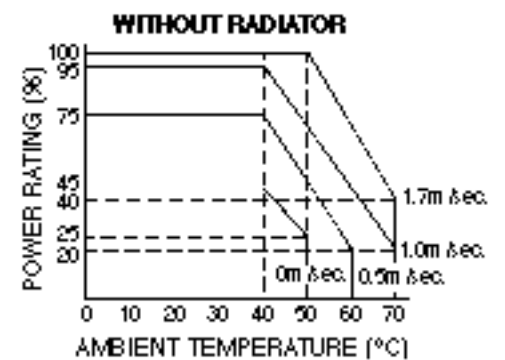
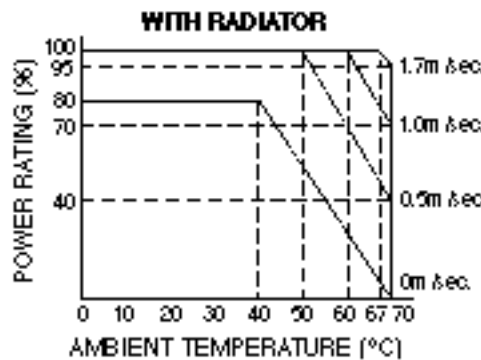
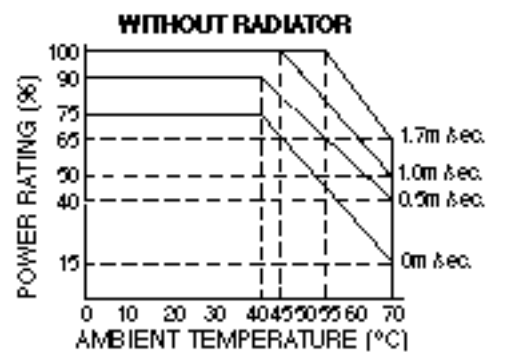
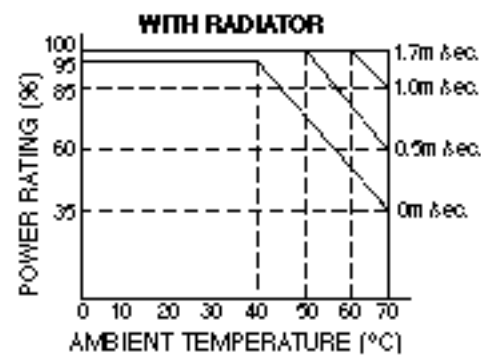
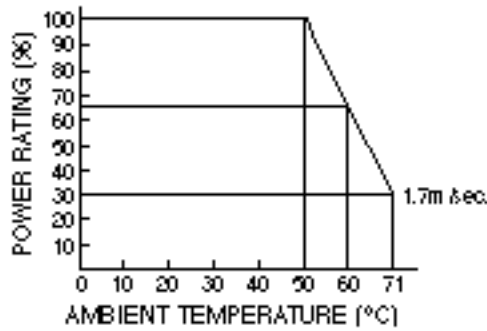
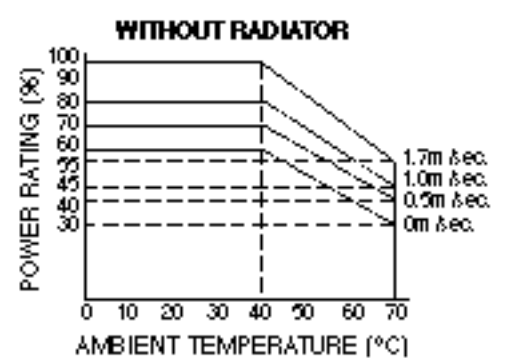
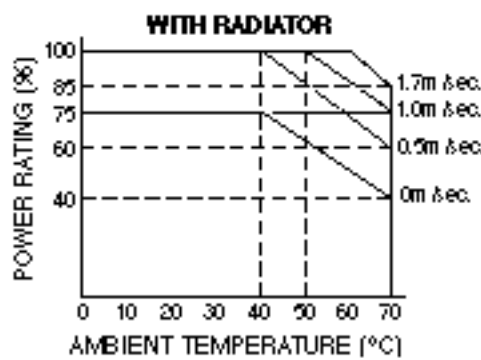
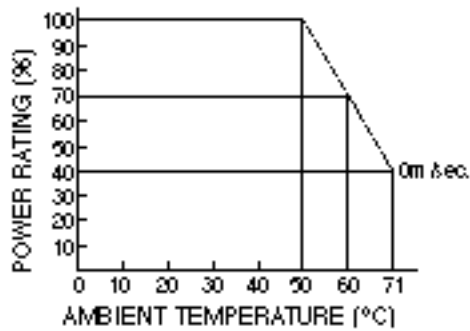
* 5Hz to 20mHz.

** Output stays within this voltage range.

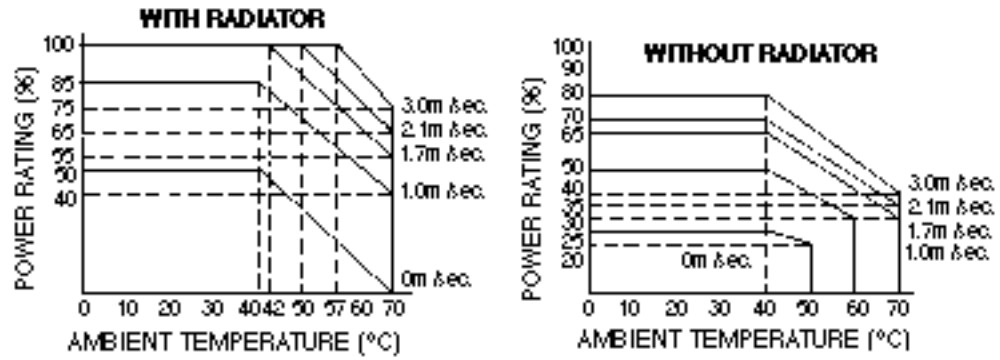
FPD GENERAL SPECIFICATIONS

SPECIFICATION	RATING/DESCRIPTION	CONDITION
Temperature	0-71°C (full power to 50°C)	Operating
	-40 to +75°C	Storage
	85°C, 100% load 95°C, 80% load (Overtemperature protection built-in) Finned radiators available for 50W & 100W	Baseplate
	No finned radiator required 0.50°C, 100% load 60°C, 70% load 71°C, 40% load	5W and 10W
Shock	50g, 3 axes	
Vibration	5g, 10-55Hz	
Isolation	100MΩ, 500V at 25°C, 65% RH	Input-Output
	100MΩ, 500V at 25°C, 65% RH	Input ground
Humidity	5%-95% RH (non-condensing)	
Enclosure	Plastic UL 94V-0 with aluminum base	

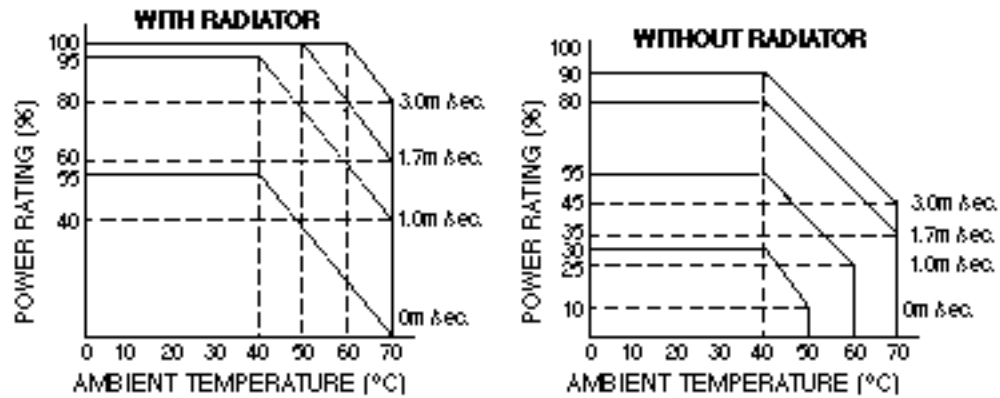
OUTPUT POWER VS. AMBIENT TEMPERATURE



OUTPUT POWER VS. AMBIENT TEMPERATURE



FPD 100W-24V MODELS

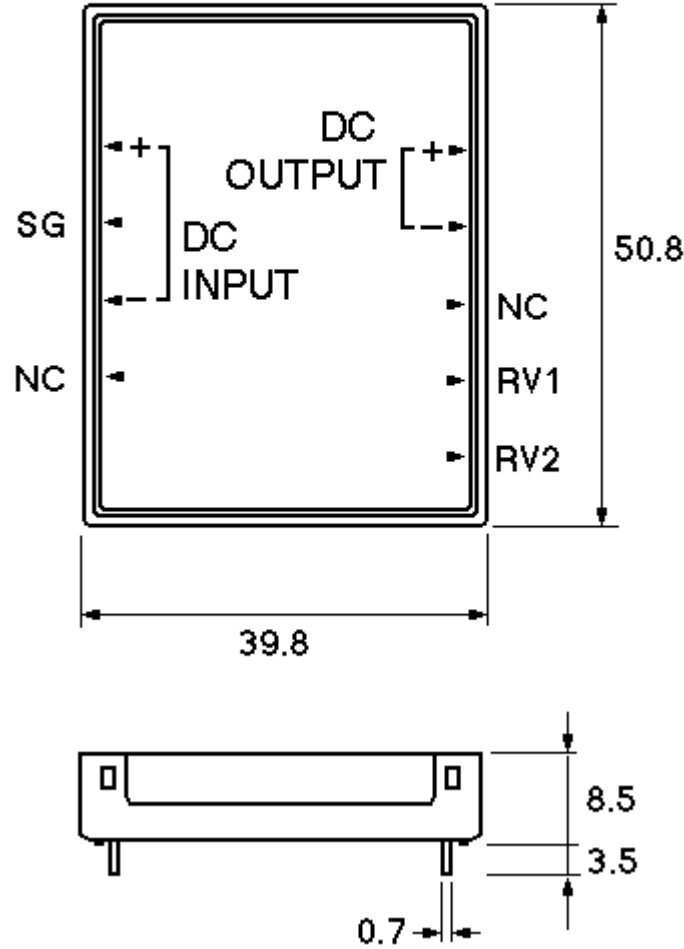


FPD 100W-48V MODELS

FPD 5W (20-56V)

All dimensions are in millimeters.

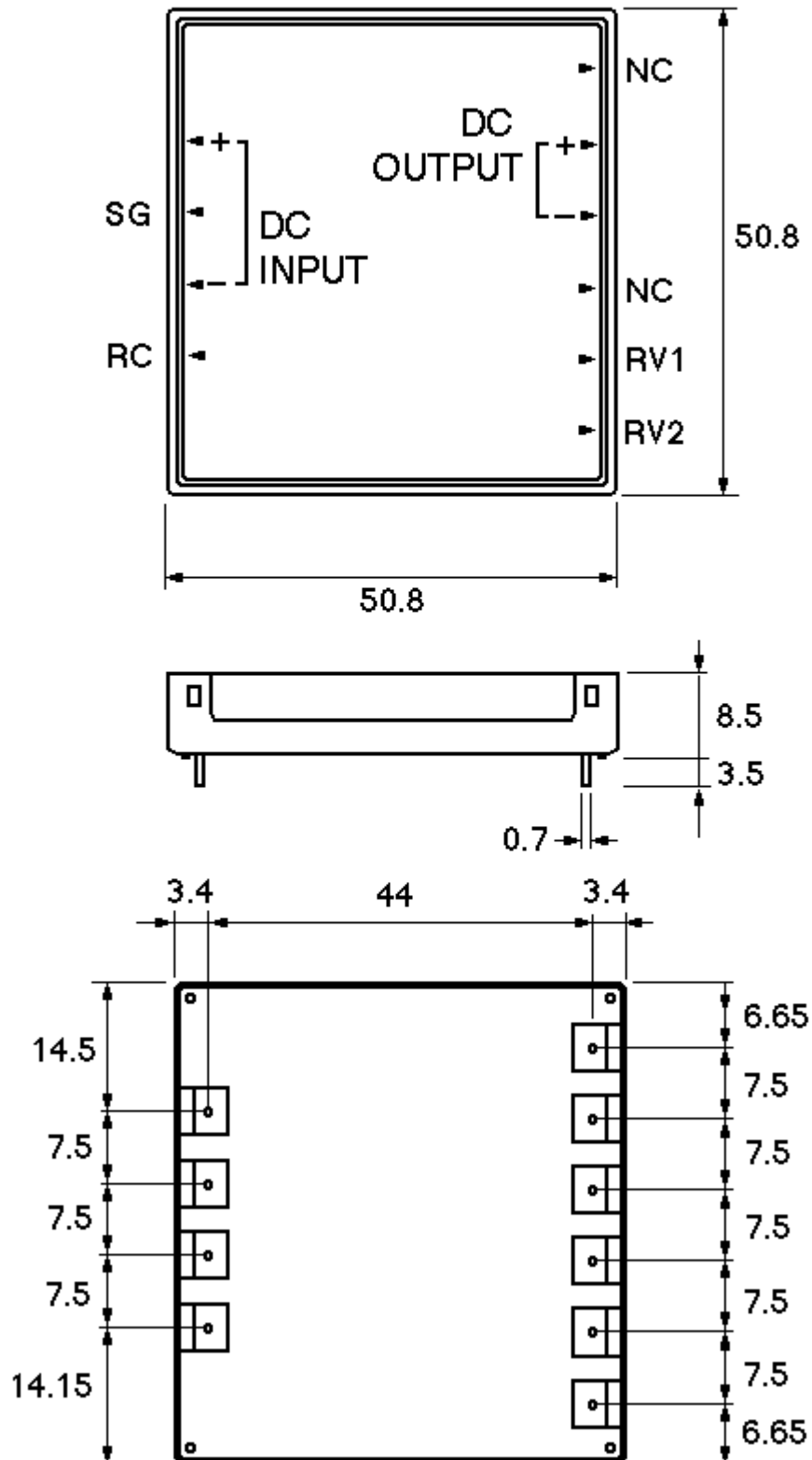
Tolerance: 0.03" (0.7mm) unless otherwise noted



FPD 10W (20-56V)

All dimensions are in millimeters.

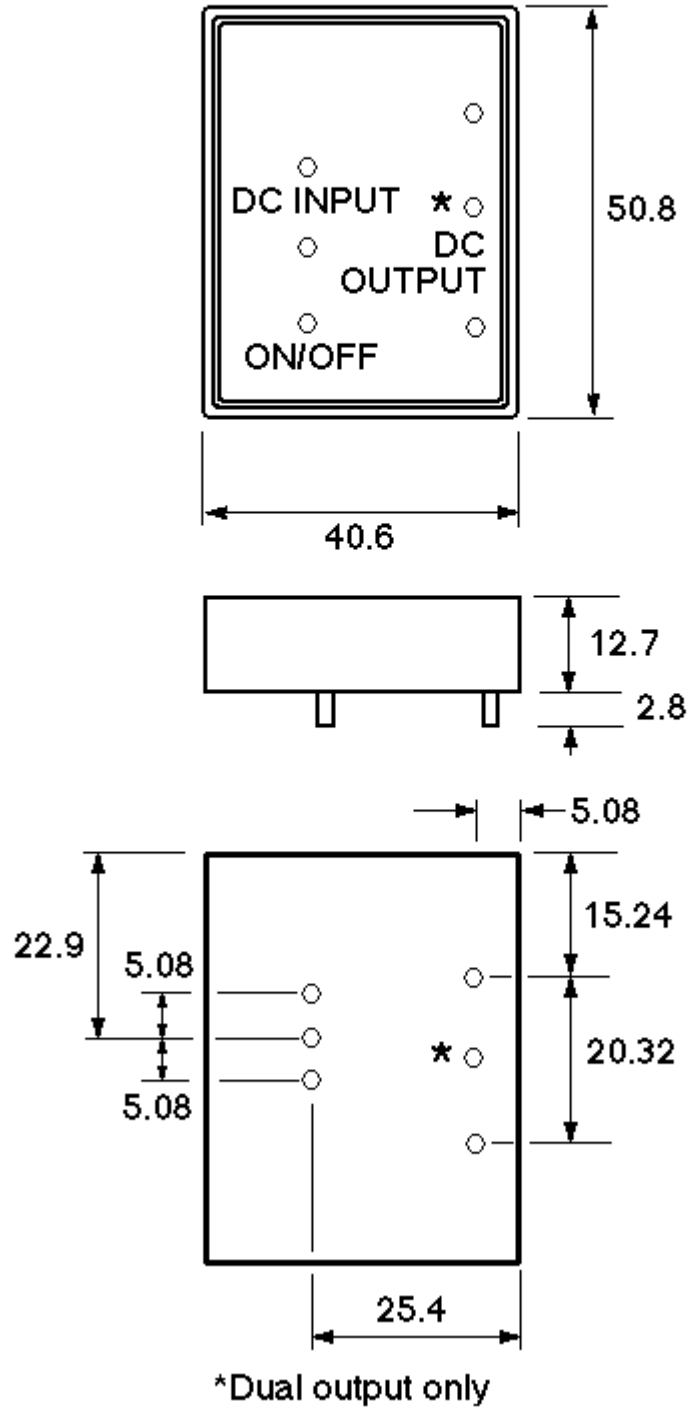
Tolerance: 0.03" (0.7mm) unless otherwise noted



FPD 10W (36-72V)

All dimensions are in millimeters.

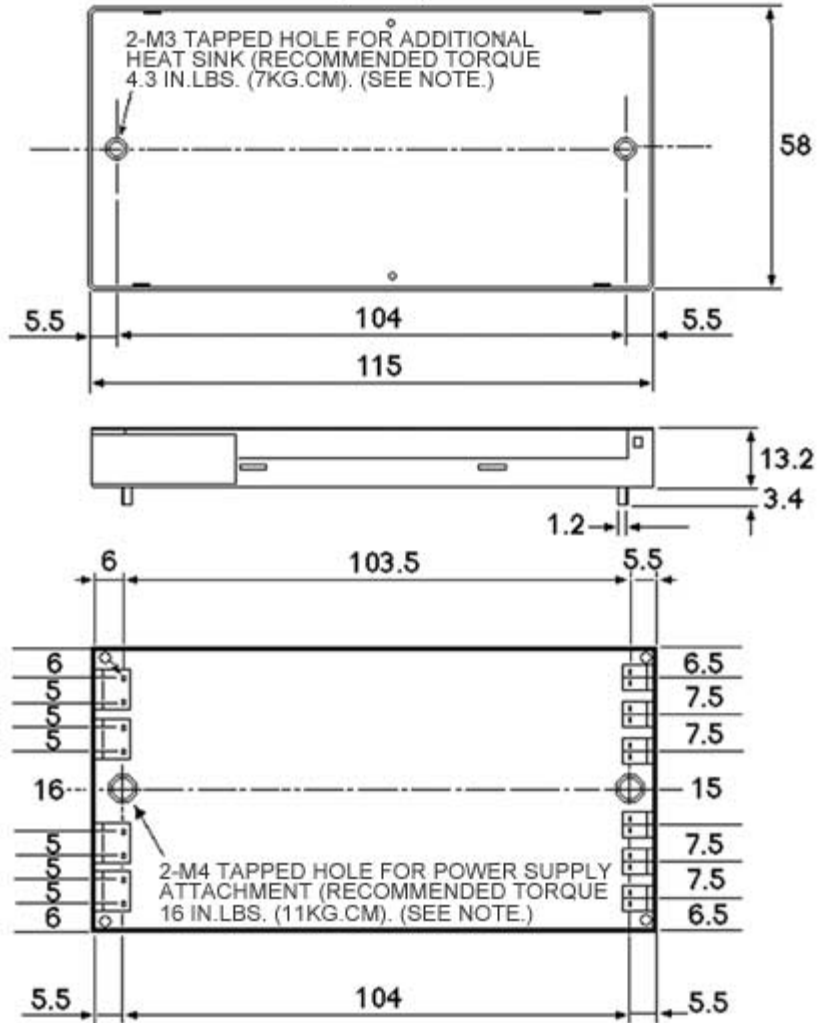
Tolerance: 0.03" (0.7mm) unless otherwise noted



FPD 50W (12V, 24V, 48V) FPD 100W (24V, 48V)

All dimensions are in millimeters.

Tolerance: 0.03" (0.7mm) unless otherwise noted

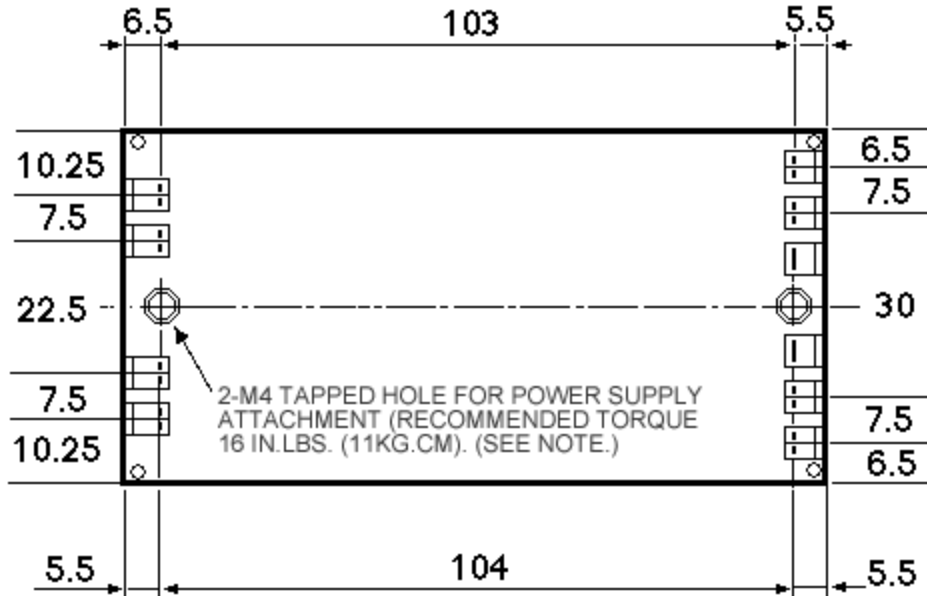


NOTE: MAXIMUM PENETRATION FOR SCREWS FOR M3 AND M4 MOUNTING HOLES NOT TO BE MORE THAN 0.24 IN. (6MM) FROM CASE SURFACE.

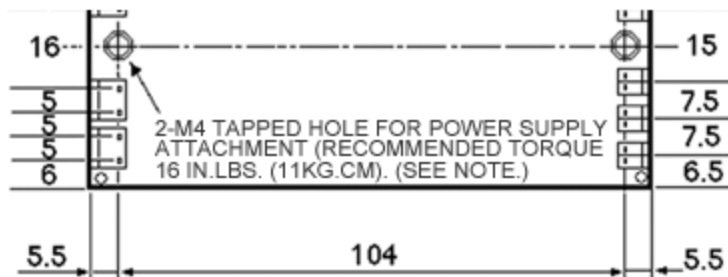
FPD 50W (150V)

All dimensions are in millimeters.

Tolerance: 0.03" (0.7mm) unless otherwise noted



NOTE: MAXIMUM PENETRATION FOR SCREW FOR M4 MOUNTING HOLES NOT TO BE MORE THAN 0.24 IN. (6MM) FROM CASE SURFACE.

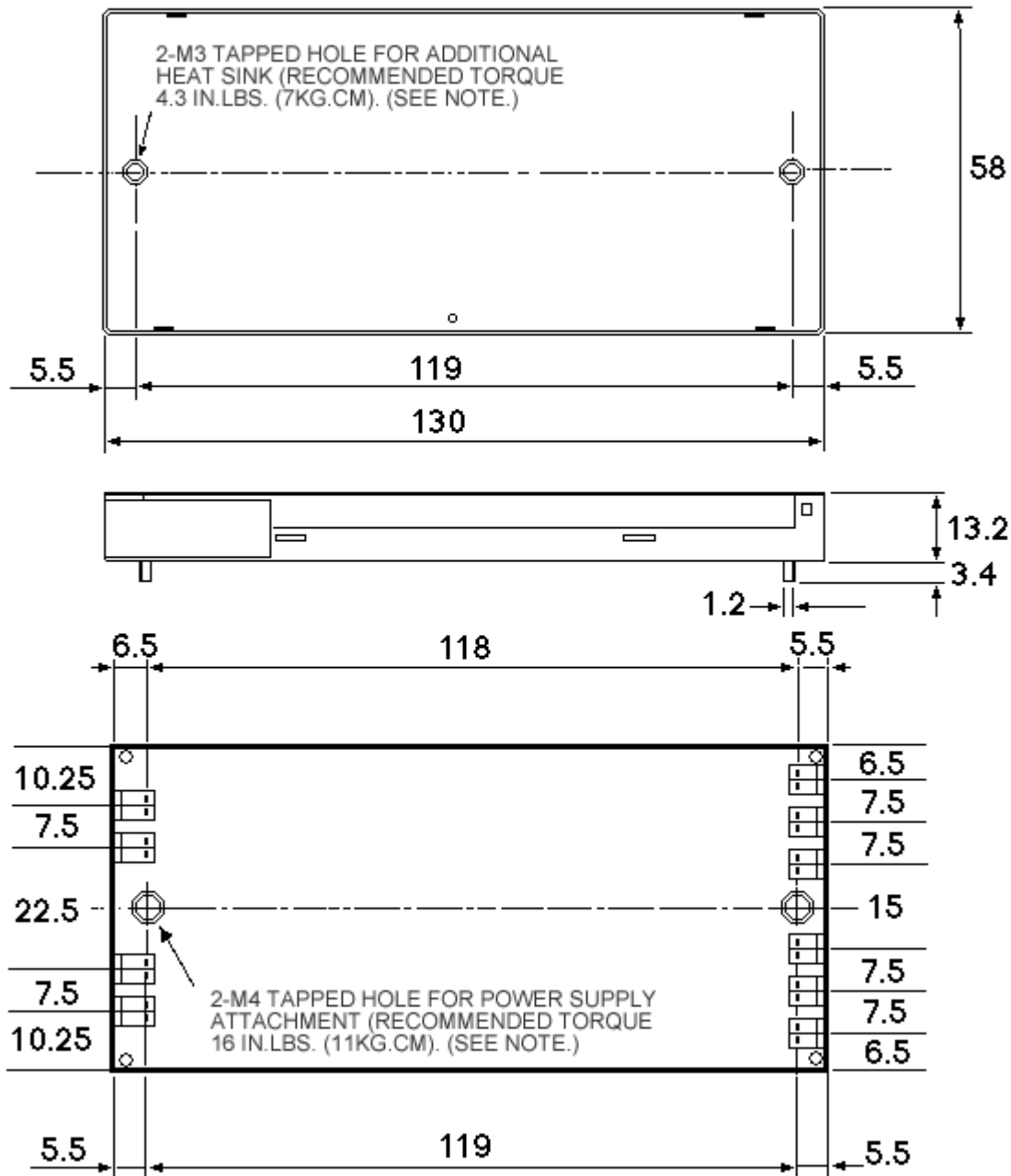


NOTE: MAXIMUM PENETRATION FOR SCREWS FOR M3 AND M4 MOUNTING HOLES NOT TO BE MORE THAN 0.24 IN. (6MM) FROM CASE SURFACE.

FPD 100W (150V)

All dimensions are in millimeters.

Tolerance: 0.03" (0.7mm) unless otherwise noted



NOTE: MAXIMUM PENETRATION FOR SCREWS FOR M3 AND M4 MOUNTING HOLES NOT TO BE MORE THAN 0.24 IN. (6MM) FROM CASE SURFACE.