



INDUSTRIAL PRESS-FIT POWER RECTIFIERS TYPE 50A

Features

- High Surge Capability
- High Voltage Available
- Designed For A Wide Range of Application
- Leaded Version Available
- Types Up to 600V V_{RRM}
- Open junction

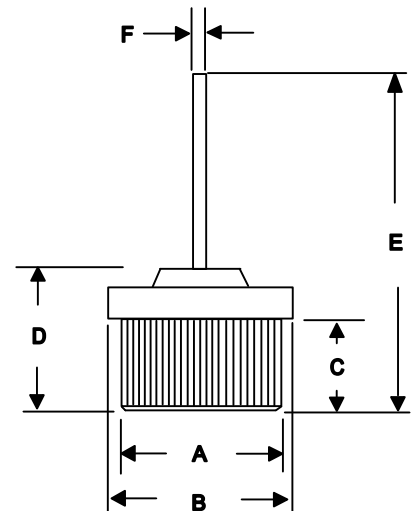
50Amp Rectifier
50-600 Volts

PRESS - FIT

Maximum Ratings

Operating Temperature: -65°C to $+190^{\circ}\text{C}$
Storage Temperature: -65°C to $+190^{\circ}\text{C}$

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
PFD5001(R)	50V	35V	50V
PFD5002(R)	100V	70V	100V
PFD5003(R)	200V	140V	200V
PFD5004(R)	400V	280V	400V
PFD5005(R)	600V	420V	600V



Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	50A	$T_C = 150^{\circ}\text{C}$
Peak Forward Surge Current	I_{FSM}	500A	8.3ms, half sine
Maximum Instantaneous Forward Voltage *	V_F	1.0V 1.1V	$I_{FM} = 25\text{A}; T_A = 25^{\circ}\text{C}$ $I_{FM} = 50\text{A}; T_A = 25^{\circ}\text{C}$
Maximum Instantaneous DC Reverse Current At Rated DC Blocking Voltage	I_R	5 μA 500 μA	$T_A = 25^{\circ}\text{C}$ $T_A = 100^{\circ}\text{C}$
Maximum thermal resistance, junction to case	$R_{\theta jc}$	1.2 $^{\circ}\text{C}/\text{W}$	

- Notes:
1. Standard Polarity: Lead is Cathode
2. Reverse Polarity: Lead is Anode

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.501	0.505	12.73	12.82	
B	0.621	0.629	15.77	15.97	
C	0.224	0.232	5.70	5.90	
D	0.378	0.390	9.60	9.90	
E	1.102	-----	28.00	-----	
F	0.050	0.051	1.27	1.29	

*Pulse Test: Pulse Width 300 usec, Duty Cycle 2%



FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

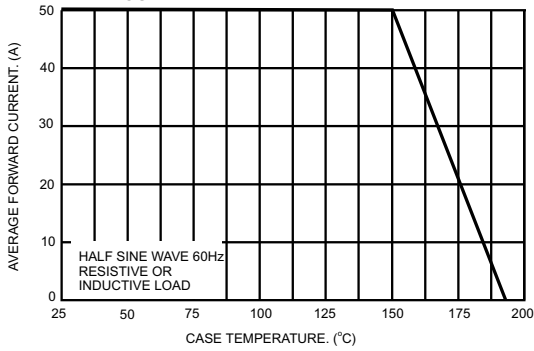


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

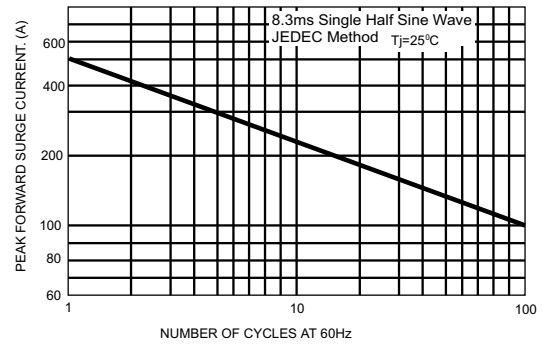


FIG.3- TYPICAL FORWARD CHARACTERISTICS

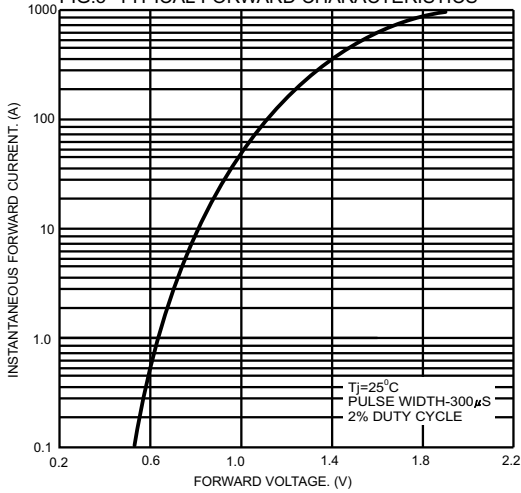


FIG.4- TYPICAL REVERSE CHARACTERISTICS

