



INDUSTRIAL PRESS-FIT POWER RECTIFIERS TYPE 50A

Features

- High Surge Capability
- High Voltage Availble
- Designed For A Wide Range of Application
- Leaded Version Availble
- Types Up to 1000V V_{RRM}
- Open junction

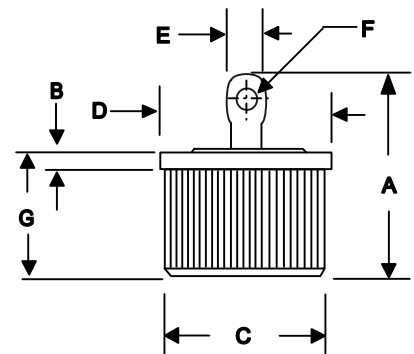
**50Amp Rectifier
50-1000 Volts**

**PRESS - FIT
BOSCH**

Maximum Ratings

Operating Temperature: -65°C to $+175^{\circ}\text{C}$
Storage Temperature: -65°C to $+175^{\circ}\text{C}$

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
PFM5001(R)	50V	35V	50V
PFM5002(R)	100V	70V	100V
PFM5003(R)	200V	140V	200V
PFM5004(R)	400V	280V	400V
PFM5005(R)	600V	420V	600V
PFM5006(R)	800V	560V	800V
PFM5007(R)	1000V	700V	1000V



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}	800A	8.3ms , half sine
Maximum Instantaneous Forward Voltage *	V_F	1.0V	$I_{FM} = 50A;$ $T_J = 25^{\circ}\text{C}$
Maximun Instanteous DC Reverse Current At Rated DC Blocking Voltage	I_R	10uA 500uA	$T_J = 25^{\circ}\text{C}$ $T_J = 150^{\circ}\text{C}$
Maximum thermal resistance, junction to case	$R_{\theta jc}$	1.2 °C /w	

Notes:

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

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.665	0.681	16.90	17.30	
B	0.099	Ref.	2.53	Ref.	
C	0.501	0.505	12.75	12.85	
D	0.621	0.625	15.78	15.88	
E	0.173	0.189	4.40	4.80	
F	0.070	0.082	1.80	2.10	
G	0.370	0.374	9.42	9.52	

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



FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

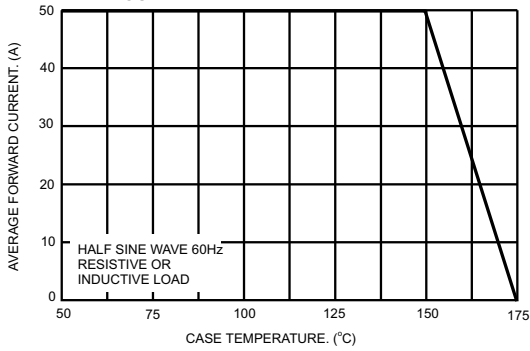


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

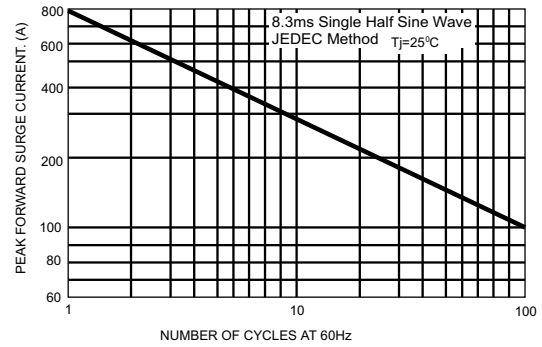


FIG.3- TYPICAL FORWARD CHARACTERISTICS

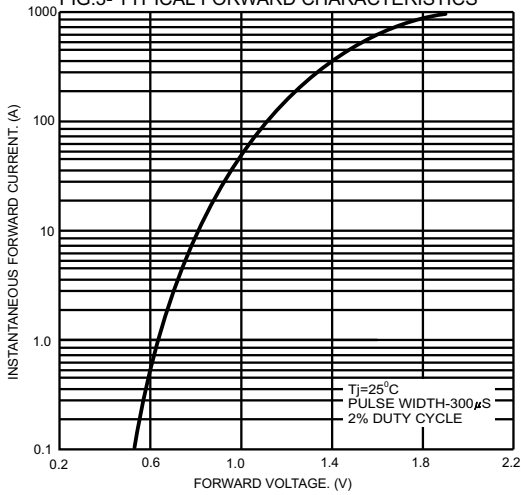


FIG.4- TYPICAL REVERSE CHARACTERISTICS

