



INDUSTRIAL PRESS-FIT POWER RECTIFIERS TYPE 50A

Features

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

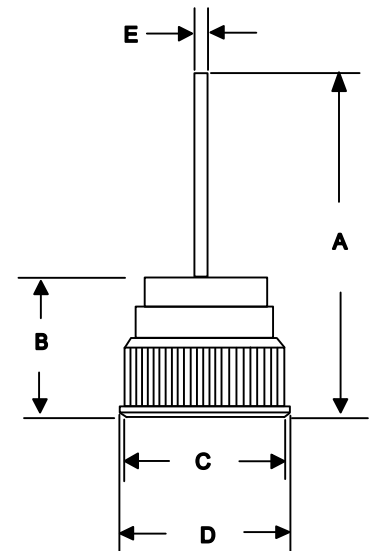
50Amp Rectifier
50-1000 Volts

**PRESS - FIT
BOSCH**

Maximum Ratings

Operating Temperature: -65°C to +215 °C
Storage Temperature: -65°C to +215 °C

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
PFBM5001H(R)	50V	35V	50V
PFBM5002H(R)	100V	70V	100V
PFBM5003H(R)	200V	140V	200V
PFBM5004H(R)	400V	280V	400V
PFBM5005H(R)	600V	420V	600V
PFBM5006H(R)	800V	560V	800V
PFBM5007H(R)	1000V	700V	1000V



Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	50A	$T_C = 175\text{ }^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	600A	8.3ms, half sine
Maximum Instantaneous Forward Voltage *	V_F	1.10V	$I_{FM} = 50A;$ $T_J = 25\text{ }^\circ\text{C}$
Maximun Instanteous DC Reverse Current At Rated DC Blocking Voltage	I_R	10uA 200uA	$T_J = 25\text{ }^\circ\text{C}$ $T_J = 175\text{ }^\circ\text{C}$
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	0.68	0.71	17.20	18.20	
B	0.38	0.39	9.70	10.00	
C	0.503	0.506	12.78	12.84	
D	0.509	0.511	12.92	12.98	
E	0.057	0.058	1.45	1.50	

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



FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

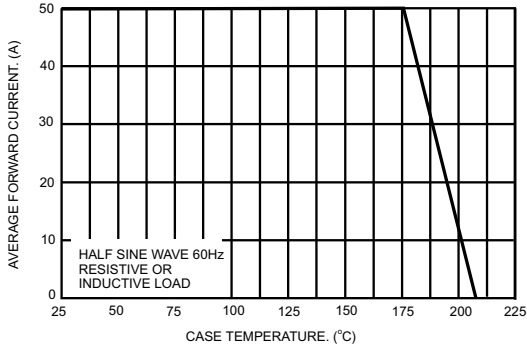


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

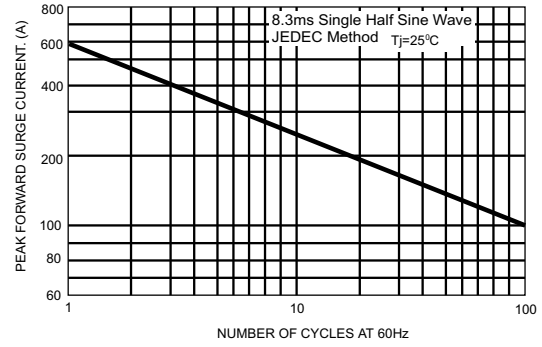


FIG.3- TYPICAL FORWARD CHARACTERISTICS

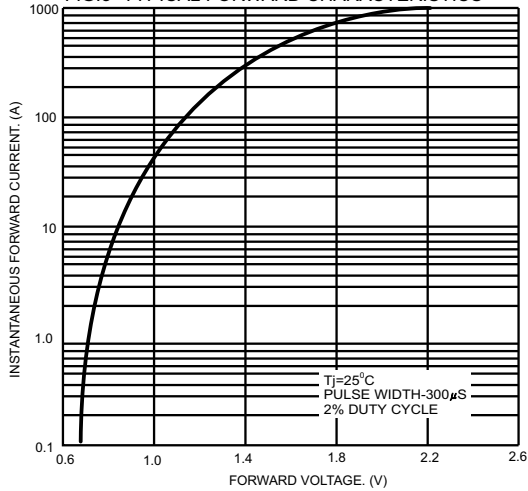


FIG.4- TYPICAL REVERSE CHARACTERISTICS

