



**DACO SEMICONDUCTOR CO.,LTD.**

**PFBM5001-1(R)  
THRU  
PFBM5007-1(R)**

**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 1000V  $V_{RRM}$
- Open junction

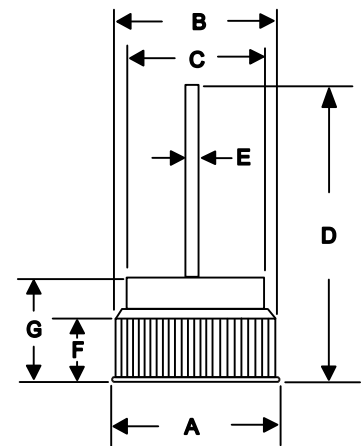
**50Amp Rectifier  
50-1000 Volts**

**PRESS - FIT  
BOSCH**

**Maximum Ratings**

Operating Temperature:  $-40^{\circ}\text{C}$  to  $+175^{\circ}\text{C}$   
Storage Temperature:  $-40^{\circ}\text{C}$  to  $+175^{\circ}\text{C}$

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
PFBM5001-1(R)	50V	35V	50V
PFBM5002-1(R)	100V	70V	100V
PFBM5003-1(R)	200V	140V	200V
PFBM5004-1(R)	400V	280V	400V
PFBM5005-1(R)	600V	420V	600V
PFBM5006-1(R)	800V	560V	800V
PFBM5007-1(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	$I_{FSM}$	500A	8.3ms, half sine
Maximum Instantaneous Forward Voltage *	$V_F$	1.0V 1.1V	$I_{FM} = 50\text{A};$ $I_{FM} = 100\text{A};$ $T_A = 25^{\circ}\text{C}$
Maximum Instantaneous DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5 uA 500uA	$T_J = 25^{\circ}\text{C}$ $T_C = 100^{\circ}\text{C}$
Maximum thermal resistance, junction to case	$R_{\theta jc}$	$1.0^{\circ}\text{C/W}$	

Notes:

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

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.504	0.520	12.80	13.20	
B	0.502	0.504	12.76	12.80	
C	0.437	0.453	11.10	11.50	
D	0.984 Min.		25.00 Min.		
E	0.050 Typ.		1.28 Typ.		
F	0.156	0.171	3.95	4.35	
G	0.303	0.319	7.70	8.10	

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



FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

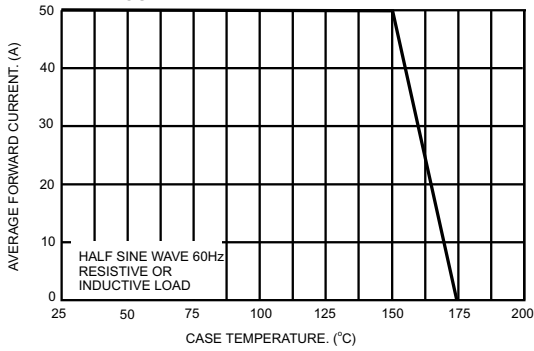


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

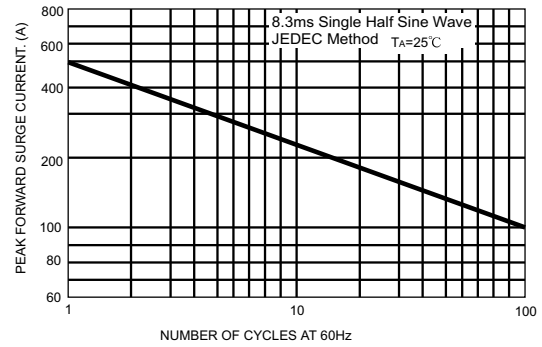


FIG.3- TYPICAL FORWARD CHARACTERISTICS

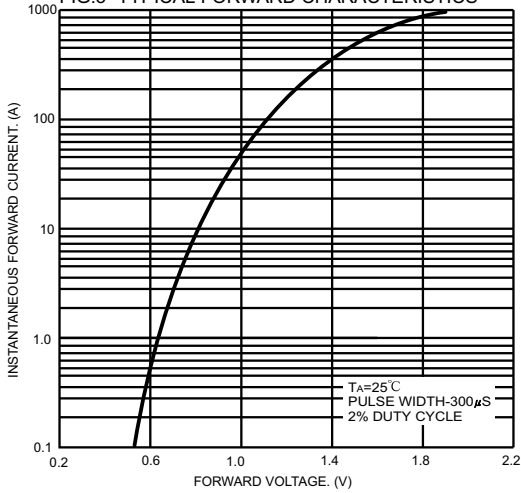


FIG.4- TYPICAL REVERSE CHARACTERISTICS

