



Micro Commercial Components  
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# PF501N thru PF507N

## Features

- Low Cost
- Low Leakage
- Low Forward Voltage Drop
- High Current Capability
- For Automotive Applications

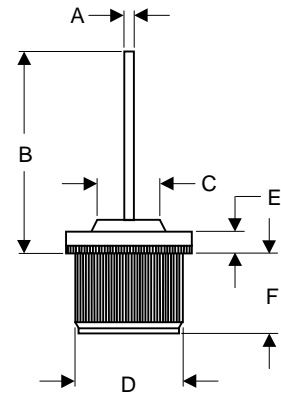
**50Amp Fast Recover  
 Rectifier  
 50 to 1000 Volts**

## Maximum Ratings

- Operating Junction Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

## PRESSFIT

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
PF501N	---	50V	35V	50V
PF502N	---	100V	70V	100V
PF503N	---	200V	140V	200V
PF504N	---	400V	280V	400V
PF505N	---	600V	420V	600V
PF506N	---	800V	560V	800V
PF507N	---	1000V	700V	1000V



## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	50A	$T_A = 125^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	650A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.0V	$I_{FM} = 50A;$ $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10 $\mu\text{A}$ 500 $\mu\text{A}$	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical Junction Capacitance	$C_J$	150pF	Measured at 1.0MHz, $V_R=4.0V$

\*Pulse test: Pulse width 300  $\mu\text{sec}$ , Duty cycle 2%

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.0984	.1062	2.5	2.7	
B	.663	.667	16.85	16.95	
C	-----	-----	-----	-----	
D	.501	.505	12.73	12.82	
E	.154	.157	3.90	4.00	
E	.224	.232	5.70	5.90	

PF501 thru PF507

Figure 1  
Typical Forward Characteristics

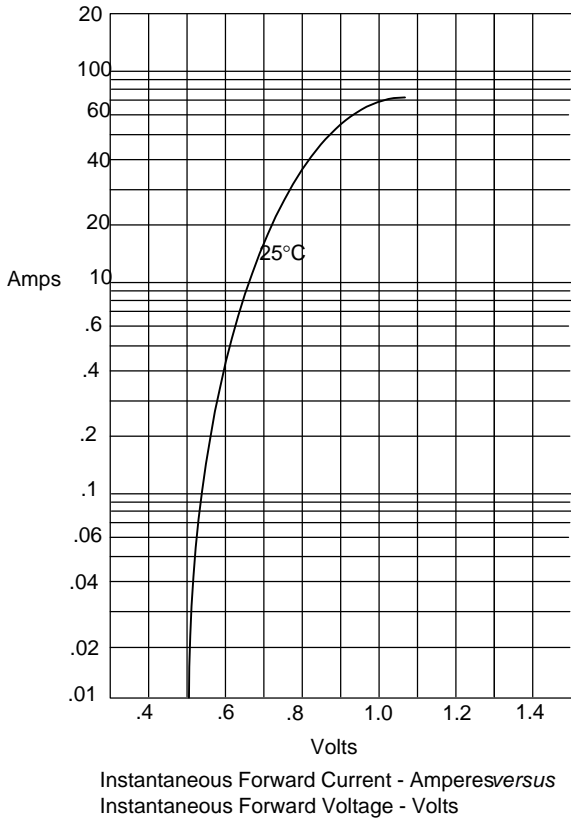


Figure 2  
Forward Derating Curve

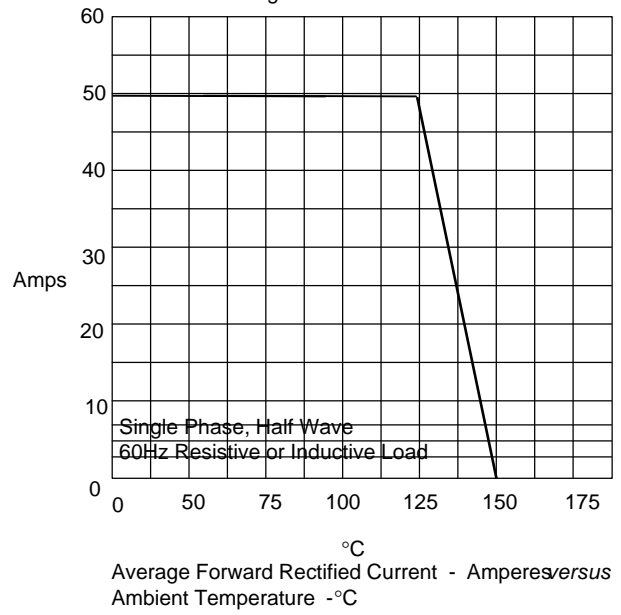


Figure 4  
Peak Forward Surge Current

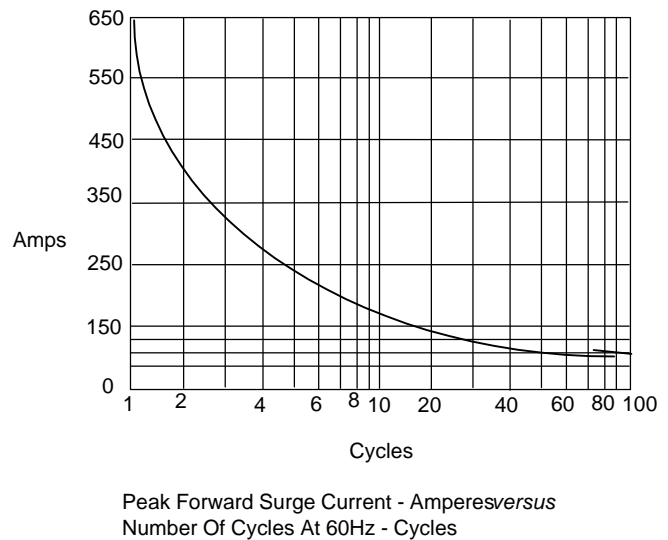


Figure 3  
Junction Capacitance

