

M.C.C.

Micro Commercial Components
21201 Itasca Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

**PF501N
thru
PF507N**

Features

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

Maximum Ratings

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

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

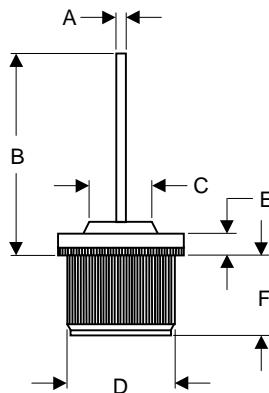
Electrical Characteristics @ 25°C Unless Otherwise Specified

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

*Pulse test: Pulse width 300 μsec , Duty cycle 2%

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

PRESSFIT

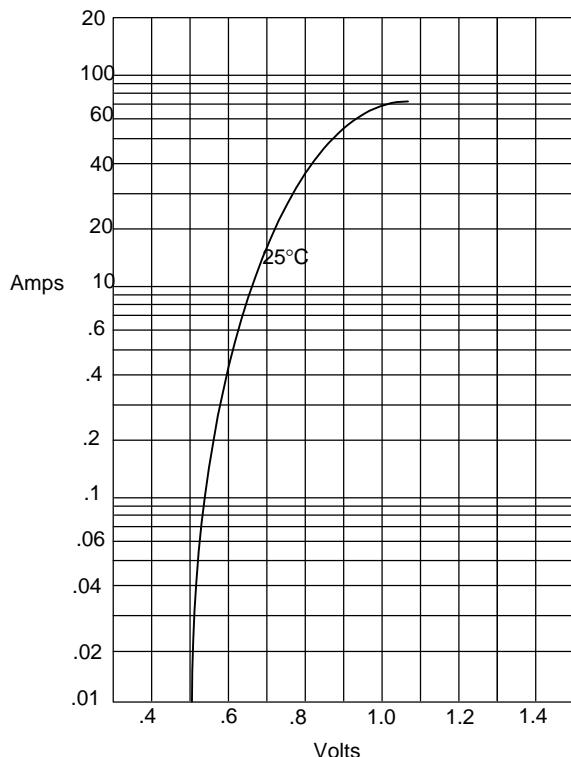


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.0984	.1062	2.5	2.7	
B	.663	.667	16.85	16.95	
C	-----	-----	-----	-----	
D	.501	.505	12.73	12.82	
E	.154	.157	3.90	4.00	
F	.224	.232	5.70	5.90	

PF501 thru PF507

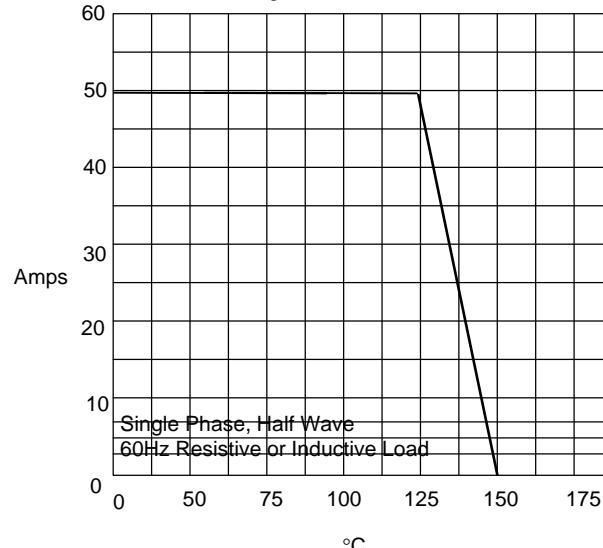
M•C•C

Figure 1
Typical Forward Characteristics



Instantaneous Forward Current - Amperesversus
Instantaneous Forward Voltage - Volts

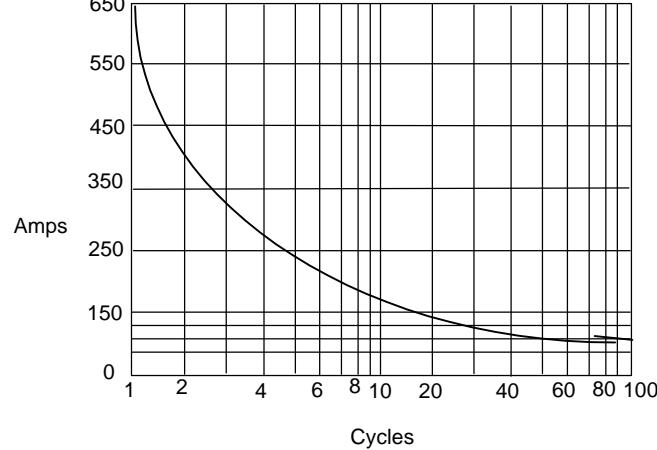
Figure 2
Forward Derating Curve



Single Phase, Half Wave
60Hz Resistive or Inductive Load

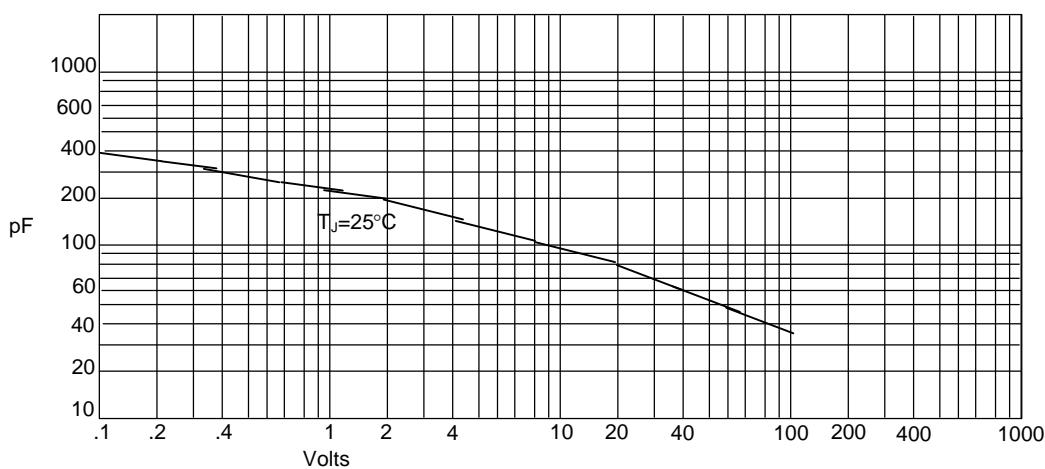
$^\circ\text{C}$
Average Forward Rectified Current - Amperesversus
Ambient Temperature - $^\circ\text{C}$

Figure 4
Peak Forward Surge Current



Peak Forward Surge Current - Amperesversus
Number Of Cycles At 60Hz - Cycles

Figure 3
Junction Capacitance



Junction Capacitance - pFversus
Reverse Voltage - Volts