

•M•C•C•

Micro Commercial Components TM

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**PF501
thru
PF505**

Features

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

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Standard polarity : Case is Cathode ; Lead is Anode

Note for positive terminal part number is as shown PF501
For negative terminal add an "N" to the suffix of the part number . i.e. PF501N

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
PF501	---	50V	35V	50V
PF502	---	100V	70V	100V
PF503	---	200V	140V	200V
PF504	---	400V	280V	400V
PF505	---	600V	420V	600V

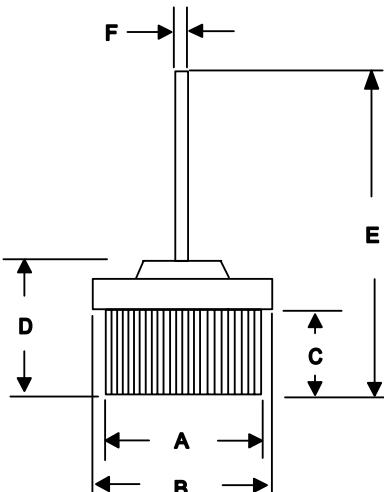
Electrical Characteristics @25°C Unless Otherwise Specified

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	$5\mu A$ $500\mu A$	$T_J = 25^\circ C$ $T_J = 100^\circ C$
Typical Junction Capacitance	C_J	150pF	Measured at 1.0MHz, $V_R=4.0V$

*Pulse test: Pulse width 300 μ sec, Duty cycle 2%

**50Amp Standard Recovery Rectifier
50 to 600 Volts**

PRESSFIT



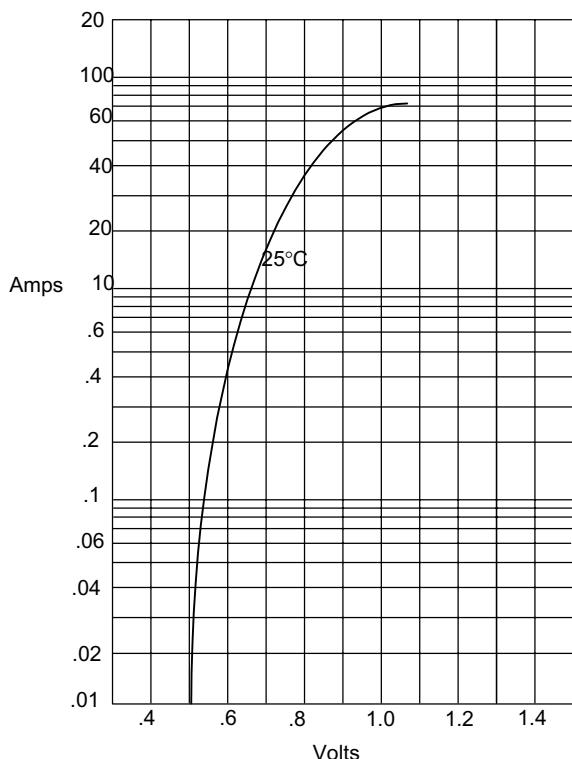
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.501	0.505	12.73	12.82	
B	0.621	0.629	15.77	15.97	
C	0.224	0.232	5.70	5.90	
D	0.378	0.390	9.60	9.90	
E	1.102	28.00	
F	0.048	0.052	1.22	1.32	

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PF501 thru PF505

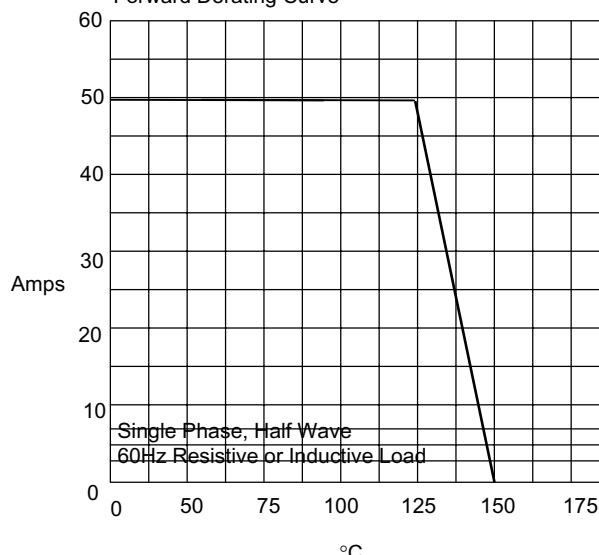
Figure 1

Typical Forward Characteristics



Instantaneous Forward Current - Amperesversus
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve

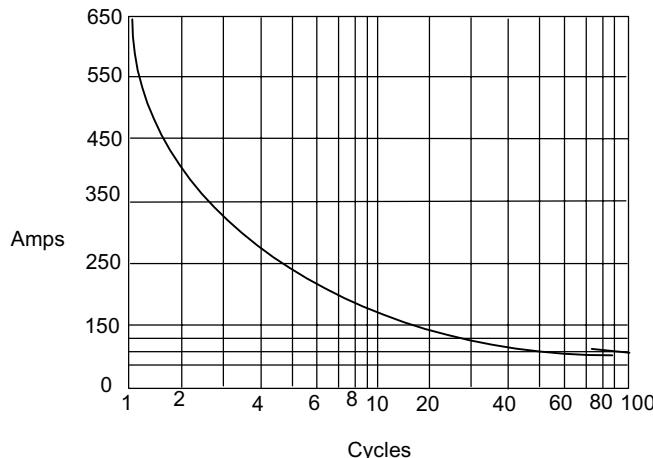


Single Phase, Half Wave
60Hz Resistive or Inductive Load

°C

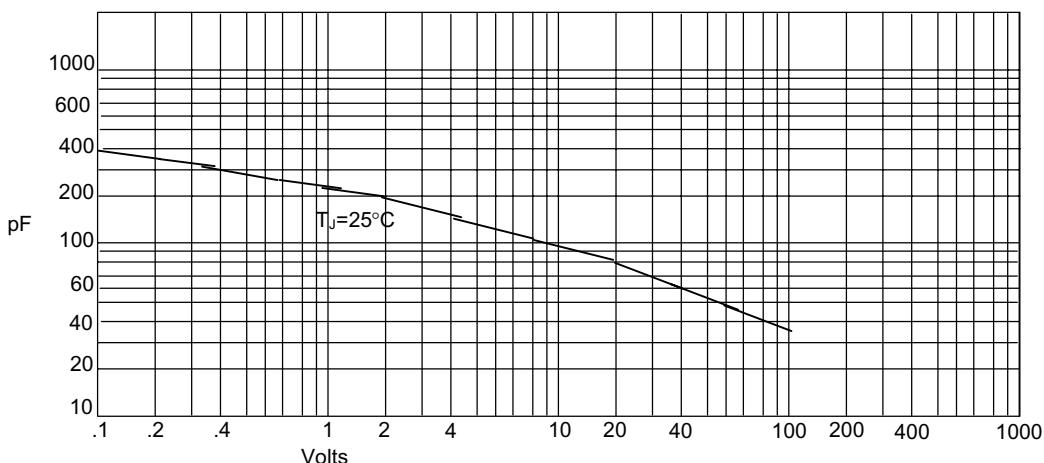
Average Forward Rectified Current - Amperesversus
Ambient Temperature - °C

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



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