



Micro Commercial Components

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20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

PF501 thru PF505

Features

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

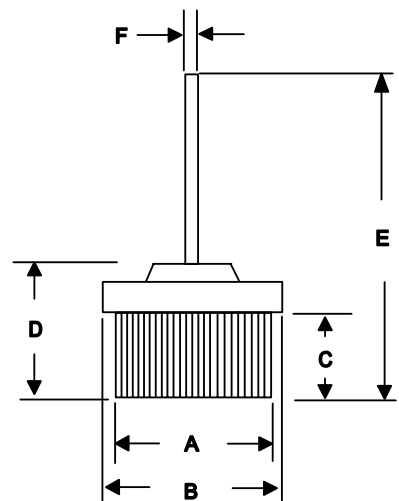
50Amp Standard Recovery Rectifier 50 to 600 Volts

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

PRESSFIT



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	$I_{FM} = 50\text{A};$ $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5 μA 500 μA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$
Typical Junction Capacitance	C_J	150pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

DIM	DIMENSIONS				NOTE
	INCHES		MM		
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	

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

PF501 thru PF505

Figure 1
Typical Forward Characteristics

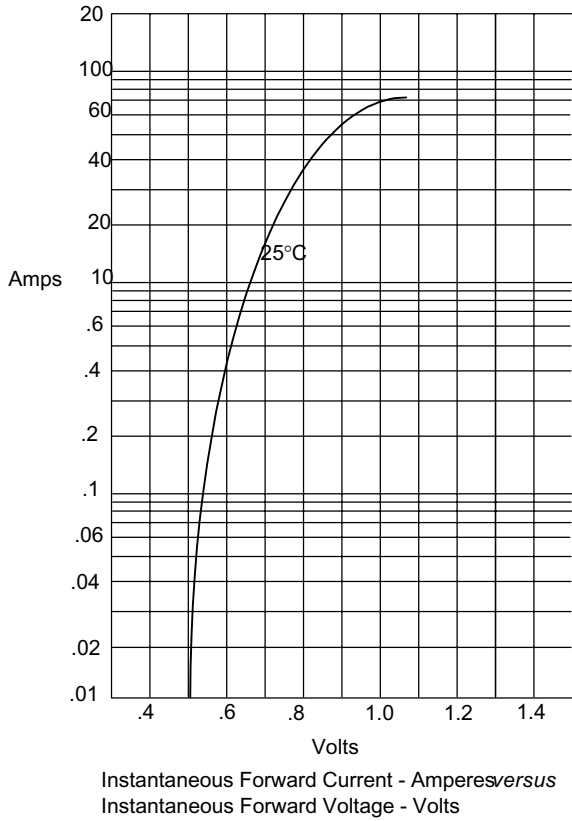


Figure 2
Forward Derating Curve

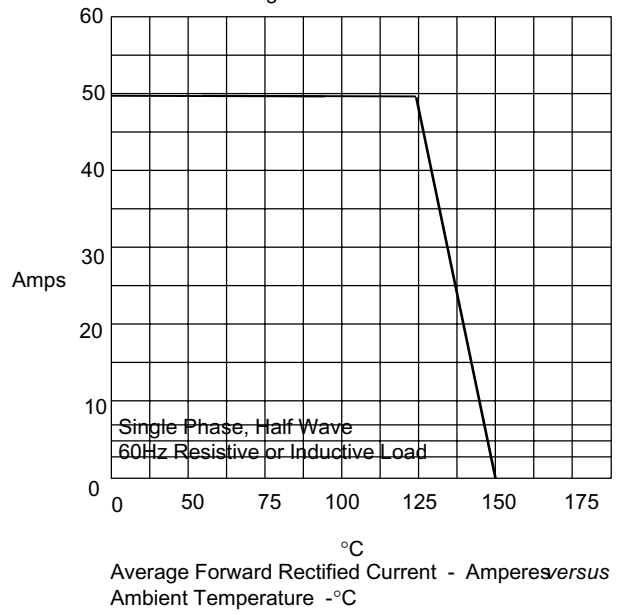


Figure 4
Peak Forward Surge Current

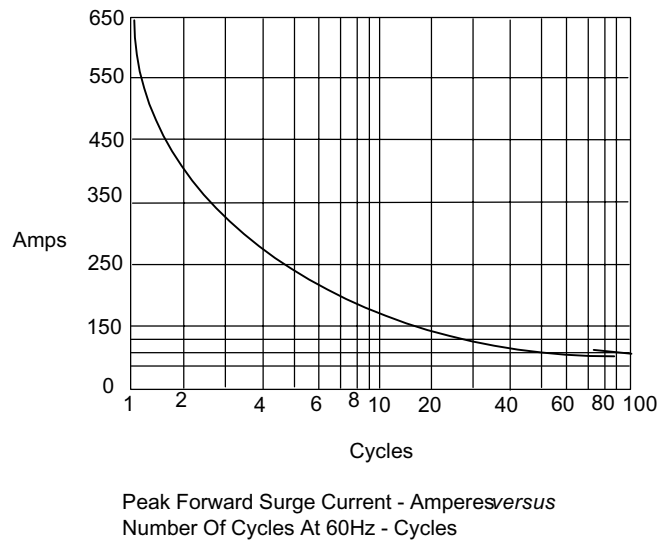
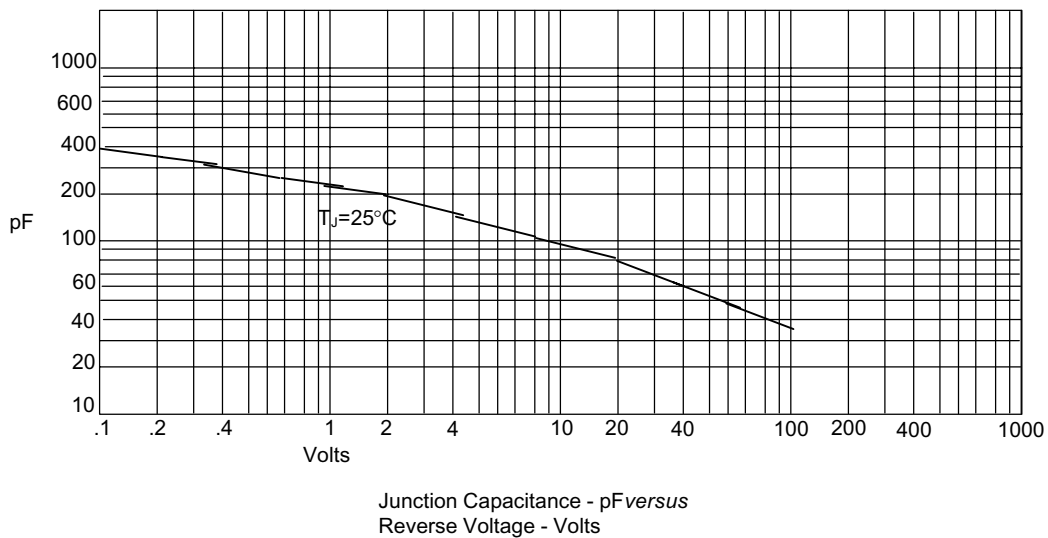


Figure 3
Junction Capacitance





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