



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

# PF501L thru PF507L

## Features

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

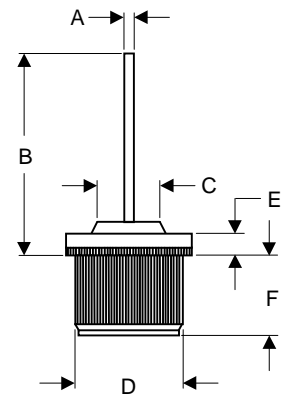
## 50Amp Standard Recovery Rectifier 50 to 1000 Volts

## 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  
 For negative terminal add an "N" to the suffix of the part number . i.e. PF501NL

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
PF501L	---	50V	35V	50V
PF502L	---	100V	70V	100V
PF503L	---	200V	140V	200V
PF504L	---	400V	280V	400V
PF505L	---	600V	420V	600V
PF506L	---	800V	560V	800V
PF507L	---	1000V	700V	1000V

## 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	$I_{FM} = 50A;$ $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	1 $\mu\text{A}$ 10 $\mu\text{A}$	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
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	.097	.103	2.464	2.616	
B	1.063	1.142	27.00	29.00	
C	-----	.395	-----	10.04	
D	.501	.505	12.73	12.82	
E	1.22	.130	3.10	3.30	
E	.258	.278	6.55	7.05	

PF501L thru PF507L

Figure 1  
Typical Forward Characteristics

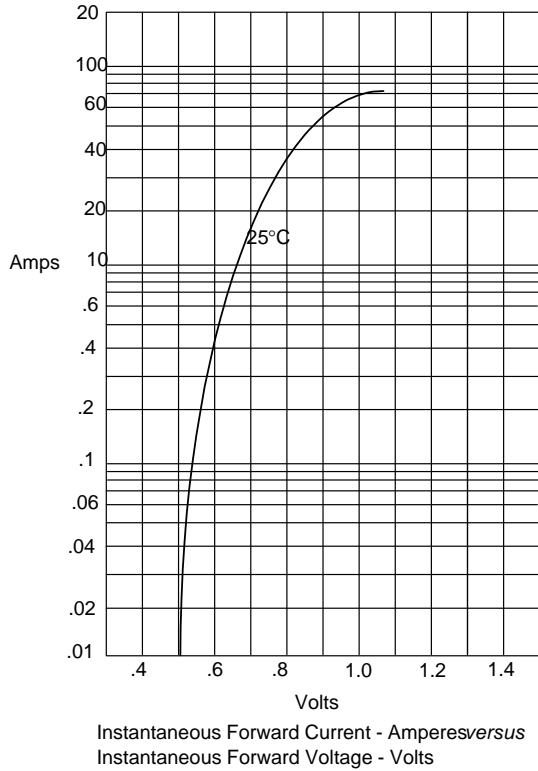


Figure 2  
Forward Derating Curve

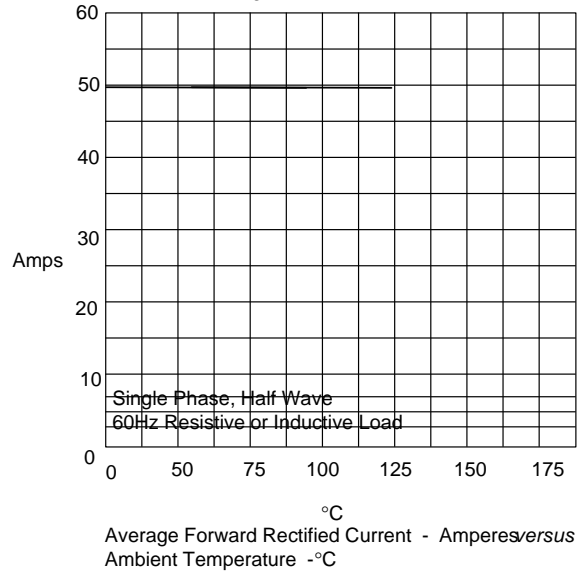


Figure 4  
Peak Forward Surge Current

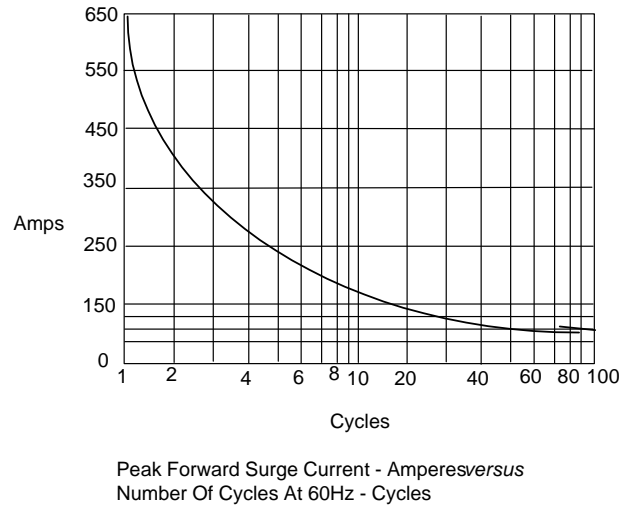


Figure 3  
Junction Capacitance

