



Micro Commercial Components

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# PF501L thru PF505L

## Features

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

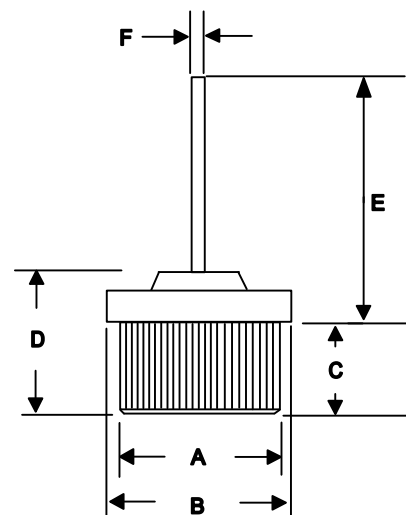
## 50Amp Standard Recovery Rectifier 50 to 800 Volts

## 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. 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

## 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	$I_{FSM}$	500A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.0V 1.1V	$I_{FM} = 50A; T_A = 25^\circ\text{C}$ $I_{FM} = 100A; T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5 $\mu\text{A}$ 500 $\mu\text{A}$	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$
Maximum thermal Resistance, junction to case	$R_{thJC}$	12°C/W	

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.502	0.505	12.75	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	0.600	0.700	15.24	17.78	
F	0.097	0.103	2.43	2.62	

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

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FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

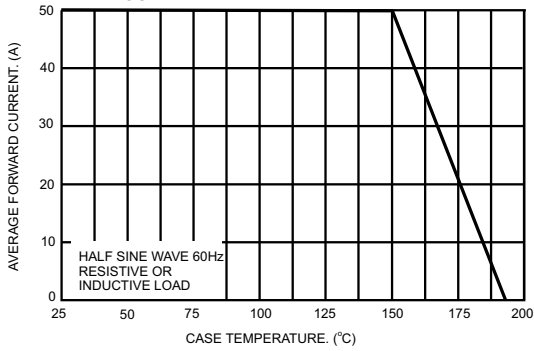


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

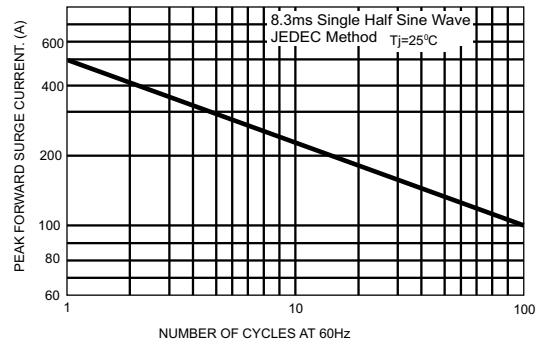


FIG.3- TYPICAL FORWARD CHARACTERISTICS

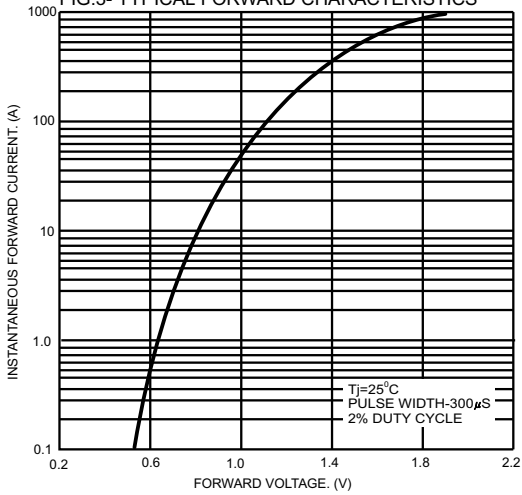
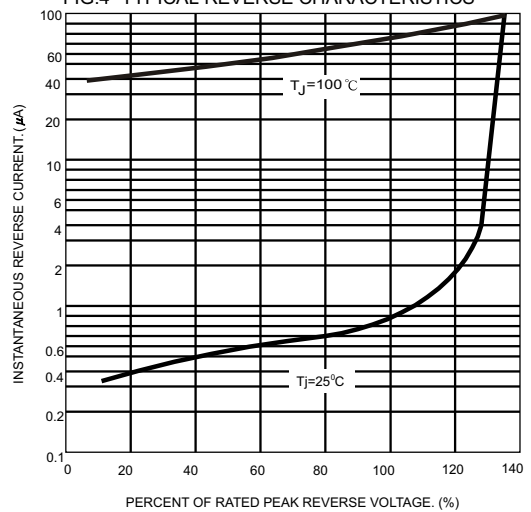


FIG.4- TYPICAL REVERSE CHARACTERISTICS





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## Ordering Information

Device	Packing
(Part Number)-BP	Bulk;100pcs/Box

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