Micro Commercial Components
21201 Itasca Street Chatsworth
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PF501L thru PF507L

50Amp Standard Recovery Rectifier 50 to 1000 Volts

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

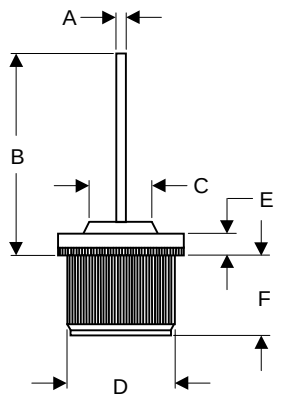
MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
PF501L	---	50V	35V	50V
PF502L	---	100V	70V	100V
PF503L	---	200V	140V	200V
PF504L	---	400V	280V	400V
PF505L	---	600V	420V	600V
PF506L	---	800V	560V	800V
PF507L	---	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	50A	T_A = 125°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°C*
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	1 µA 10µA	T_J = 25°C T_J = 125°C
Typical Junction Capacitance	C_J	150pF	Measured at 1.0MHz, V_R=4.0V

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

PRESSFIT



DIM	INCHES MIN	INCHES MAX	MM MIN	MM MAX	NOTE
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	

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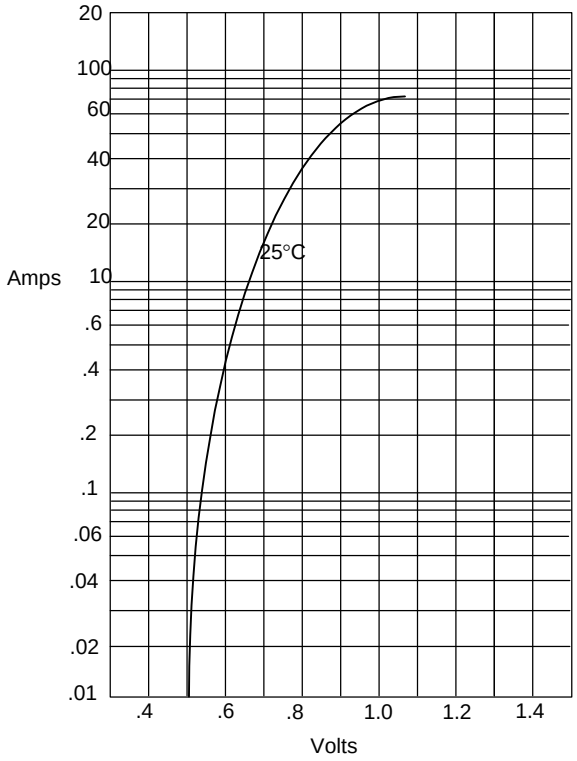
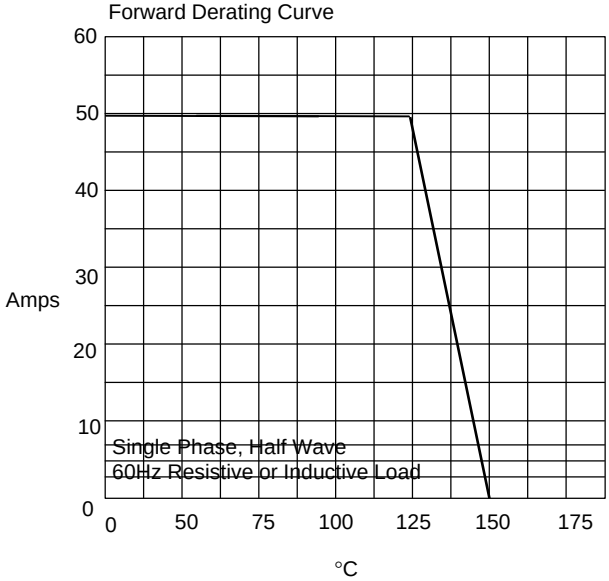
Figure 1
Typical Forward Characteristics



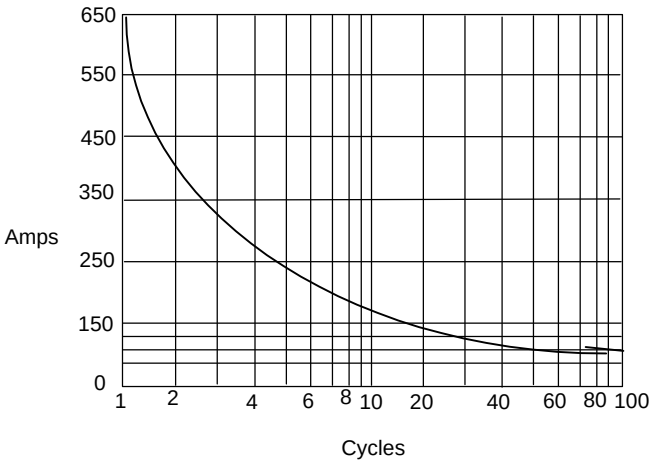
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



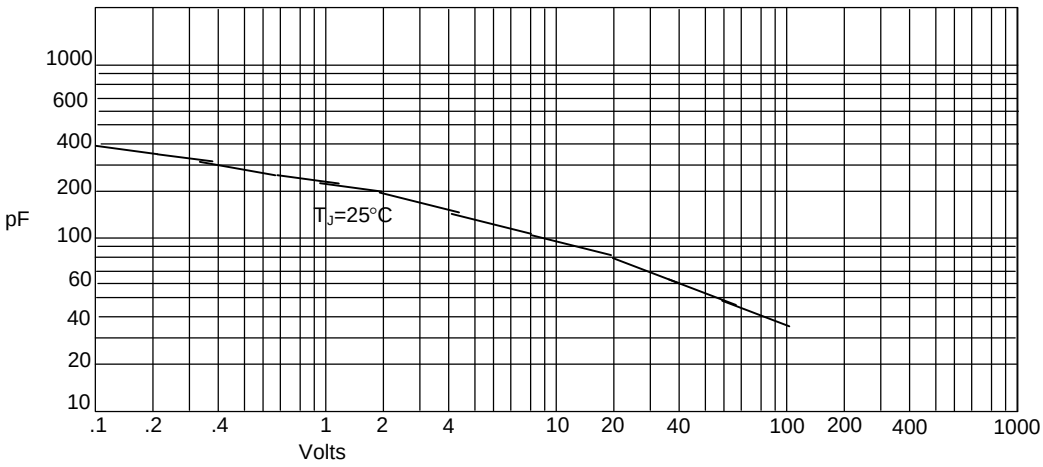
Average Forward Rectified Current - Amperes *versus*
Ambient Temperature -°C

Figure 4
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus*
Number Of Cycles At 60Hz - Cycles

Figure 3
Junction Capacitance



Junction Capacitance - pF *versus*
Reverse Voltage - Volts