

Micro Commercial Components

Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

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

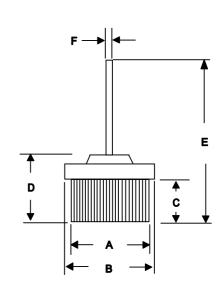
Electrical Characteristics @ 25°C Unless Otherwise Specified

| Average Forward Current | I _{F(AV)} | 50A | T _A = 125°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 | 5μΑ 500μΑ | T _J = 25°C T _J = 100°C |
| Typical Junction Capacitance | CJ | 150pF | Measured at 1.0MHz, V _R =4.0V |

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

50Amp Standard Recovery Rectifier 50 to 600 Volts

PRESSFIT

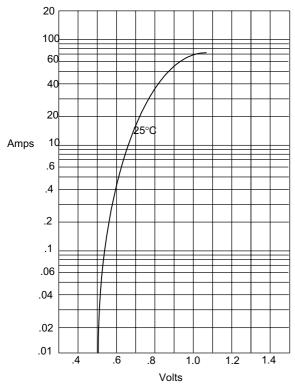


| DIMENSIONS | | | | | | | | |
|------------|--------|-------|-------|-------|------|--|--|--|
| | INCHES | | MM | | | | | |
| DIM | MIN | MAX | MIN | MAX | NOTE | | | |
| Α | 0.501 | 0.505 | 12.73 | 12.82 | | | | |
| В | 0.621 | 0.629 | 15.77 | 15.97 | | | | |
| С | 0.224 | 0.232 | 5.70 | 5.90 | | | | |
| D | 0.378 | 0.390 | 9.60 | 9.90 | | | | |
| Е | 1.102 | | 28.00 | | | | | |
| F | 0.048 | 0.052 | 1.22 | 1.32 | | | | |



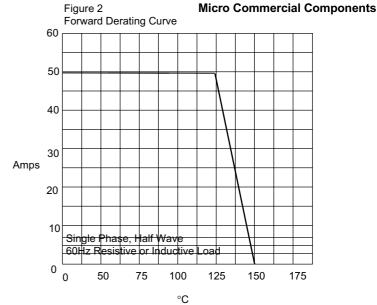
 $\cdot M \cdot C \cdot C \cdot$

Figure 1
Typical Forward Characteristics



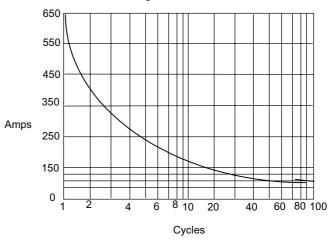
Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts





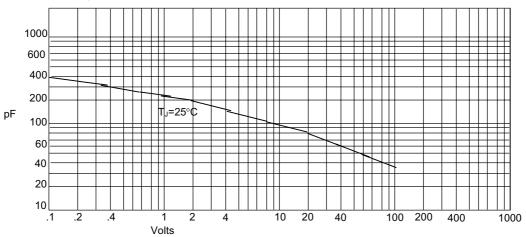
Average Forward Rectified Current - Amperes/ersus Ambient Temperature - $^{\circ}$ C

Figure 4
Peak Forward Surge Current



Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles

Figure 3
Junction Capacitance



Junction Capacitance - pF*versus* Reverse Voltage - Volts



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