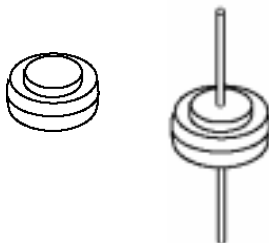
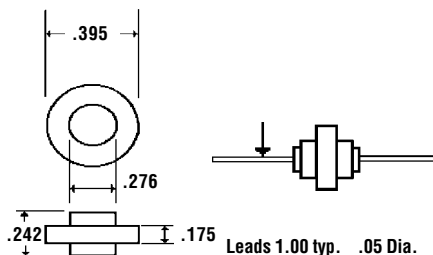
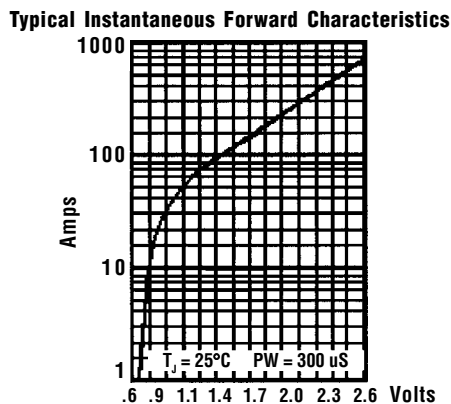
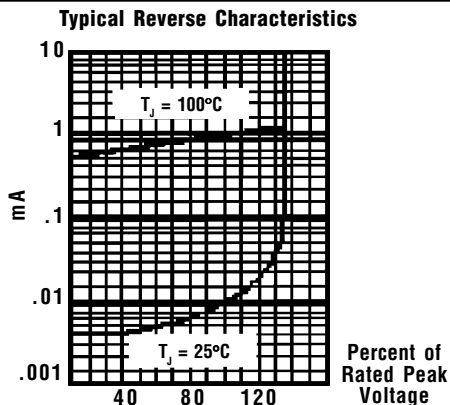
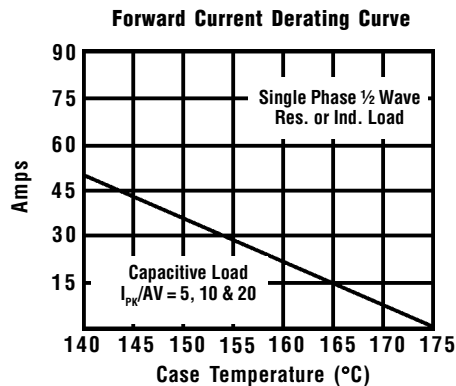
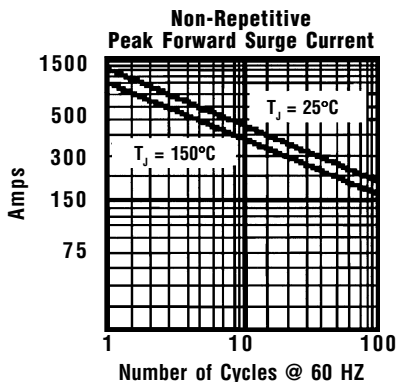
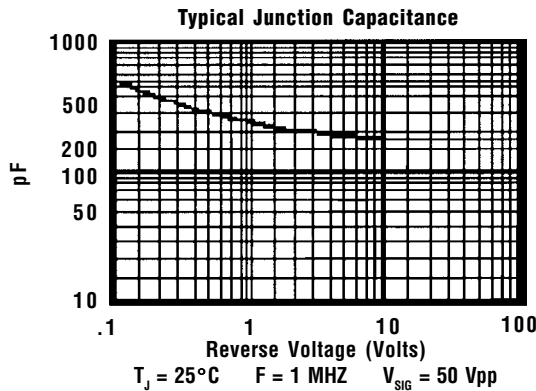


Description

Mechanical Dimensions

Features

- **LOW COST**
- **HIGH SURGE CAPABILITY**
- **DIFFUSED JUNCTION**
- **LOW LEAKAGE CURRENT**
- **HIGH TEMPERATURE CAPABILITY**
- **MEETS UL SPECIFICATION 94V-0**

Electrical Characteristics @ 25°C.	FR5001 . . . 5004 Series				Units
Maximum Ratings	FR5001	FR5002	FR5003	FR5004	
Peak Repetitive Reverse Voltage... V_{RRM}	100	200	300	400	Volts
RMS Reverse Voltage... $V_{R(rms)}$	70	140	210	280	Volts
DC Blocking Voltage... V_{DC}	100	200	300	400	Volts
Average Forward Rectified Current... $I_{F(av)}$ Single Phase Resistive Load, 60 HZ, $T_c = 150^\circ\text{C}$	.....	50	.....	.....	Amps
Non-Repetitive Peak Forward Surge Current... I_{FSM} Surge Supplied @ Rated Load Conditions, ½ Sine Wave, Single Phase, 60 HZ	.....	600	.....	.....	Amps
Forward Voltage @ 80A... V_F (Note 4)	.....	1.06	.....	.....	Volts
DC Reverse Current... I_R @ Rated DC Blocking Voltage, 150°C	.....	2.0	.....	.....	μAmps μAmps
Typical Junction Capacitance... C_j (Note 1)	.....	300	.....	.....	pF
Typical Thermal Resistance... $R_{\theta JC}$ (Note 2)	.....	0.8	.....	.....	°C / W
Typical Reverse Recovery Time... t_{RR}	.....	3.0	.....	.....	μS
Operating & Storage Temperature Range... T_J, T_{STRG}	.....	-50 to 175	.....	.....	°C



Ratings at
25 Deg. C ambient
temperature
unless otherwise
specified.

Single Phase Half
Wave, 60 HZ
Resistive or
Inductive Load.

For Capacitive
Load, Derate
Current by 20%.

- NOTES:**
1. Measured @ 1 MHz and applied reverse voltage of 4.0V.
 2. Thermal Resistance Junction to Case, Jedec Method.
 3. When Mounted to heat sink, from body.
 4. Pulse Test: Pulse Width $\leq 300\text{ }\mu\text{S}$, Duty Cycle 2%.