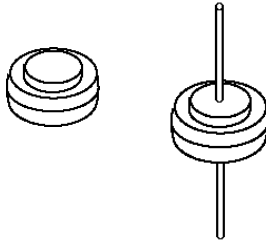
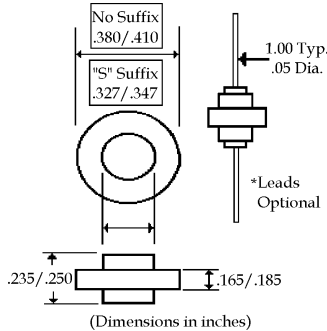


Description



Mechanical Dimensions

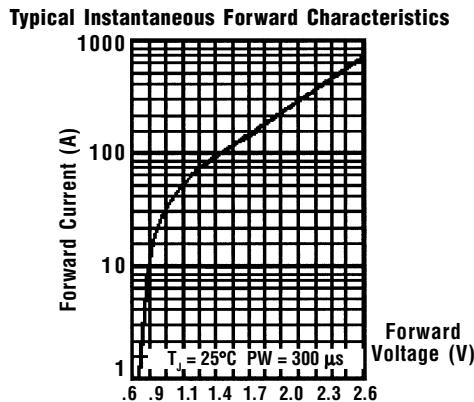
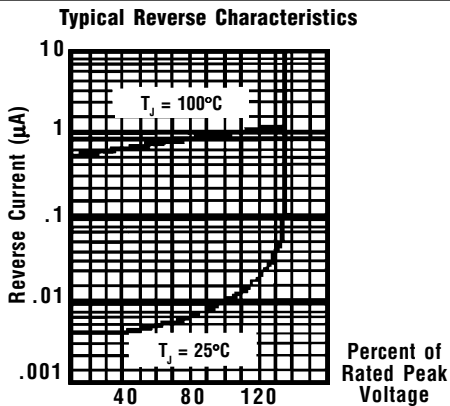
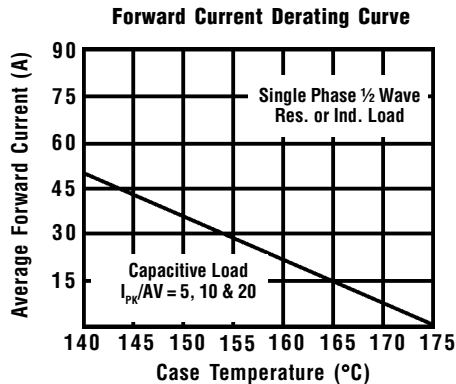
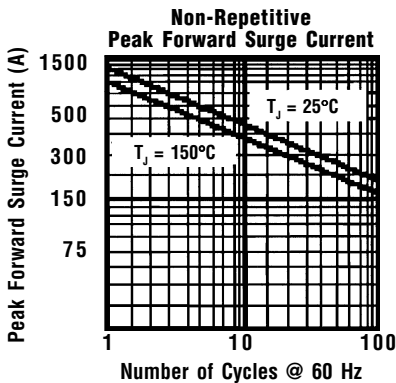
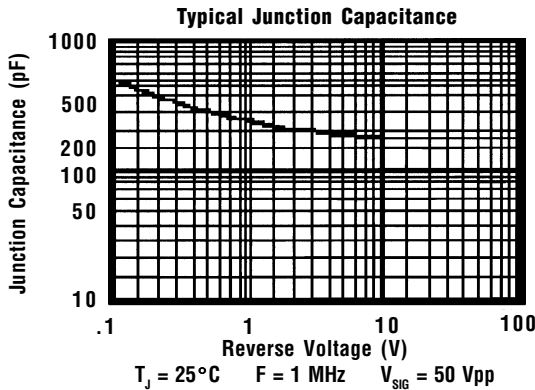


Options - Add Suffix to Part #:
FR5000L = 2 Leads
For 1 Lead:
FR5000C = Lead On Cathode
FR5000A = Lead On Anode

Features

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

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, 1/2 Sine Wave, Single Phase, 60 Hz			600		Amps
Operating & Storage Temperature Range... T_J, T_{STRG}			-50 to 175		$^\circ\text{C}$
Electrical Characteristics					
Maximum Forward Voltage @ 80A... V_F (Note 4)			1.06		Volts
Maximum DC Reverse Current... I_R @ Rated DC Blocking Voltage	25 $^\circ\text{C}$ 150 $^\circ\text{C}$		2.0 500		μAmps μAmps
Typical Junction Capacitance... C_J (Note 1)			300		pF
Typical Thermal Resistance... $R_{\theta JC}$ (Note 2)			0.8		$^\circ\text{C}/\text{W}$
Typical Reverse Recovery Time... t_{RR}			3.0		μs



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, Jeduc Method.
 3. When Mounted to heat sink, from body.
 4. Pulse Test: Pulse Width $\leq 300 \mu\text{s}$, Duty Cycle 2%.