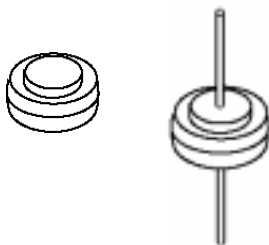
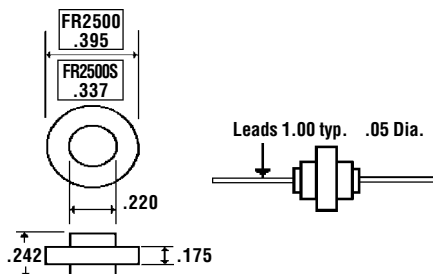


Description



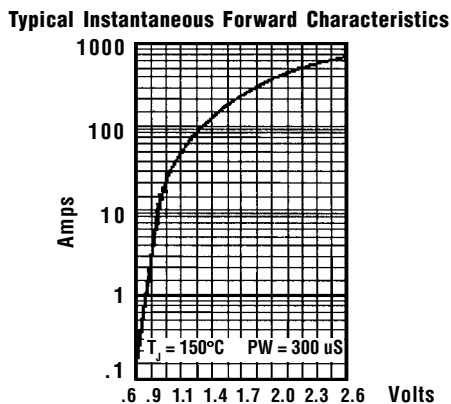
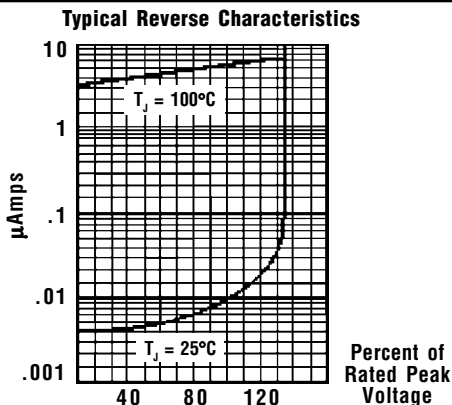
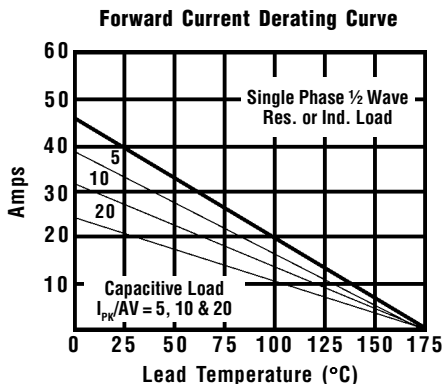
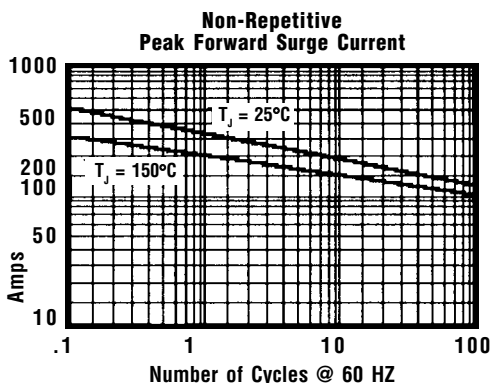
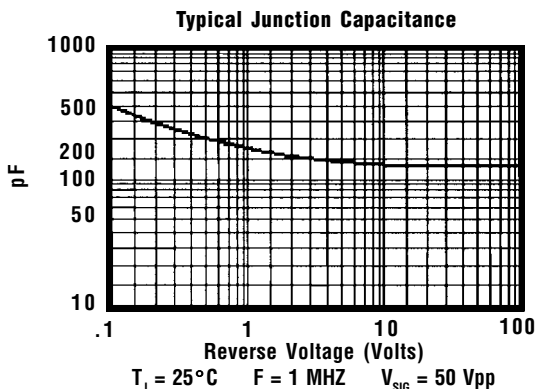
Mechanical Dimensions



Features

- **LOW COST**
- **HIGH SURGE CAPABILITY**
- **DIFFUSED JUNCTION**
- **LOW LEAKAGE CURRENT**
- **VERY FAST RECOVERY TIME (t_{RR})**
- **MEETS UL SPECIFICATION 94V-0**

Electrical Characteristics @ 25°C.	VFR2501 ... 2510 Series							Units
Maximum Ratings	VFR2501	VFR2502	VFR2503	VFR2504	VFR2506	VFR2508	VFR2510	
Peak Repetitive Reverse Voltage... V_{RRM}	100	200	300	400	600	800	1000	Volts
RMS Reverse Voltage... $V_{R(rms)}$	70	140	210	280	420	560	700	Volts
DC Blocking Voltage... V_{DC}	100	200	300	400	600	800	1000	Volts
Average Forward Rectified Current... $I_{F(av)}$ $T_A = 55^\circ\text{C}$ (Note 3)	.....			25	.....			Amps
Repetitive Peak Forward Surge Current... I_{FM} @ Rated V_R , Square Wave, 20 KHZ, $T_C = 150^\circ\text{C}$	.....			30	.....			Amps
Non-Repetitive Peak Forward Surge Current... I_{FSM} @ Rated Load Conditions, 1/2 Wave, Single Phase, 60 HZ	.....			300	.....			Amps
Forward Voltage... V_F @ $I_F = 15$ Amps, PW = 300 μS , $T_C = 150^\circ\text{C}$	< 0.880 >			< 1.12 >	<1.34>			Volts
$T_C = 25^\circ\text{C}$	< 0.975 >			< 1.3 >	<1.5>			Volts
DC Reverse Current... I_R @ Rated DC Blocking Voltage $T_C = 150^\circ\text{C}$	.....			500	.....			μAmps
$T_C = 25^\circ\text{C}$	.....			10	.....			μAmps
Typical Reverse Recovery Time... t_{RR} $I_F = 1.0$ Amp, $di/dt = 50$ Amps/ μS	< 150 >			< 200 ..... >	.....			nS
Operating & Storage Temperature Range... T_J, T_{STRG}	.....			-65 to 175	.....			$^\circ\text{C}$



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 Ambient, Jedec Method.
 3. When Mounted to heat sink, from body.