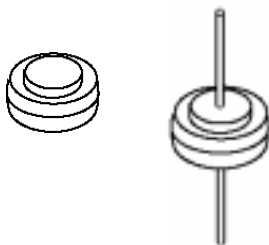
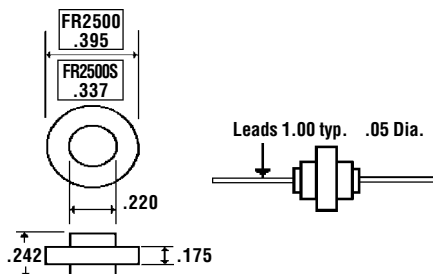
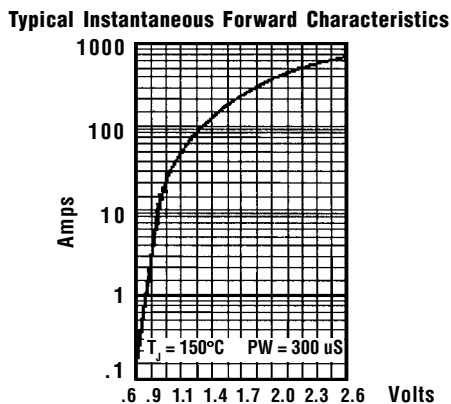
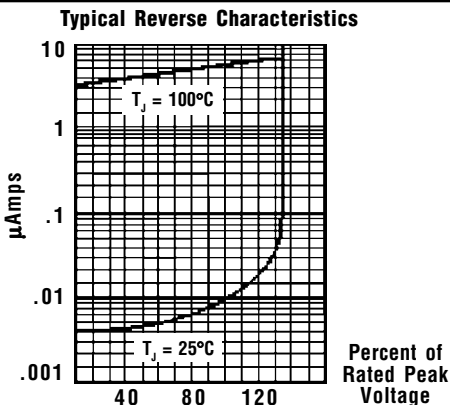
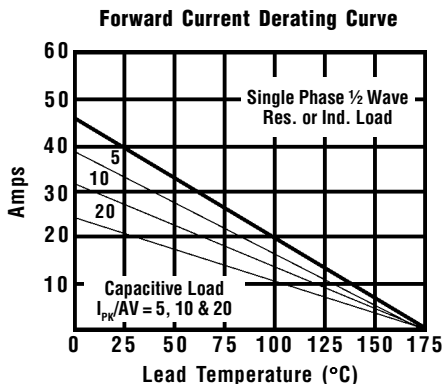
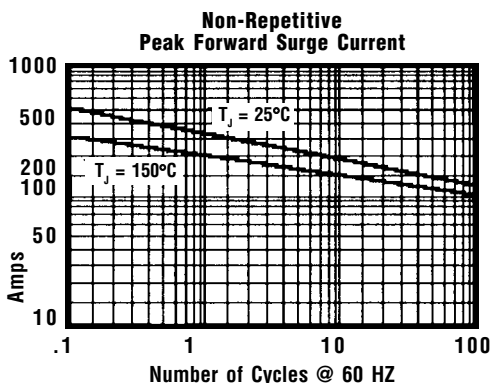
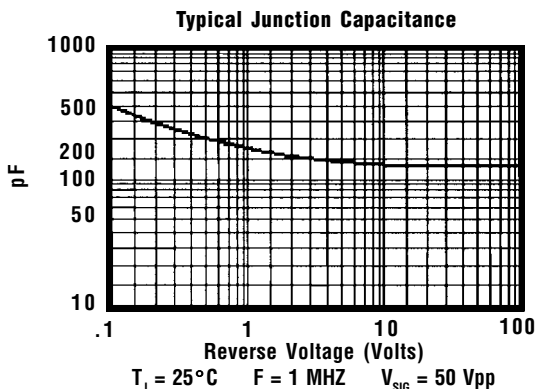


Description

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.