

Features

- Low forward voltage drop
- Low leakage
- High surge current capability



Mechanical Data

- Case: Molded plastic R-1
- Epoxy: UL94V-O flammability classification
- Polarity: Color band denotes cathode end
- High temperature soldering guaranteed:
 260°C/10 seconds, 0.375" (9.5mm) lead lengths
- Weight: 0.007 ounce, 0.20 gram

R-1



Absolute Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	GHR16	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1600	V
Maximum RMS Voltage	V_{RMS}	1120	V
Maximum DC Blocking Voltage	V_{DC}	1600	V
Maximum Average Forward Rectified Current, 0.375" (9.5mm) Lead Length @ $T_A = 55^\circ C$	$I_{(AV)}$	500	mA
Peak Forward Surge Current, 8.3 mS Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	20.0	A
Maximum Full Load Reverse Current, Full Cycle average, 0.375" (9.5mm) Lead Length @ $T_L = 55^\circ C$	$I_{R(AV)}$	100	uA
Maximum Instantaneous Forward Voltage Drop at 0.5A	V_F	1.5	V
Maximum DC Reverse Current at Rated DC Blocking Voltage at $T_A = 25^\circ C$	I_R	5.0	uA
Maximum Reverse Recovery Time at $I_F=0.5A$, $I_R=1.0A$, $I_{rr}=0.25A$	t_{rr}	300	nS
Typical Junction Capacitance at 4.0V, 1MHz	C_J	10	pF
Operating Junction Temperature Range	T_J	-55 to +150	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

Ratings and Characteristics Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

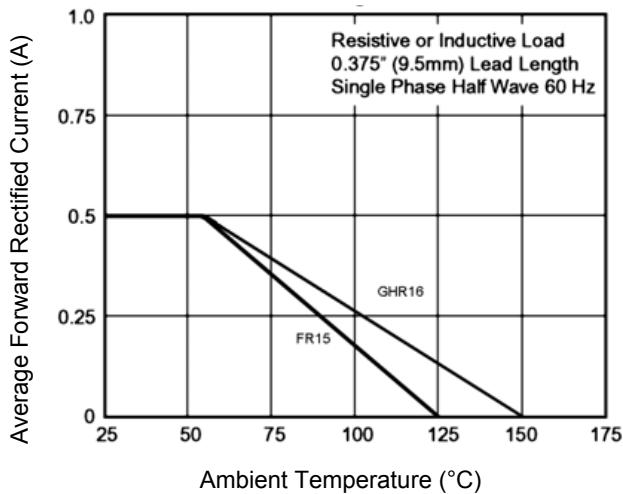


Figure 1. Maximum Forward Current Derating Curve

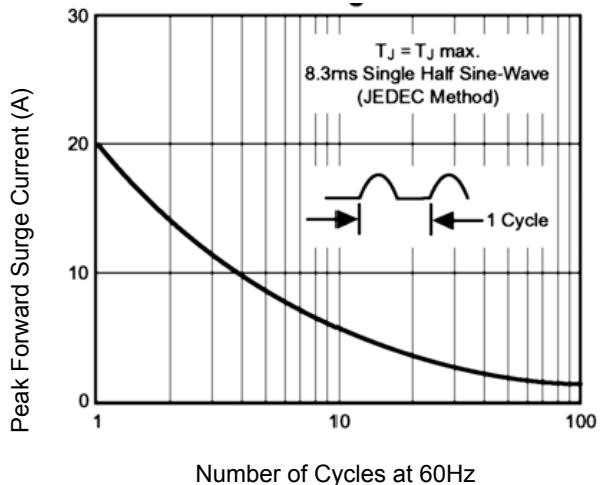


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

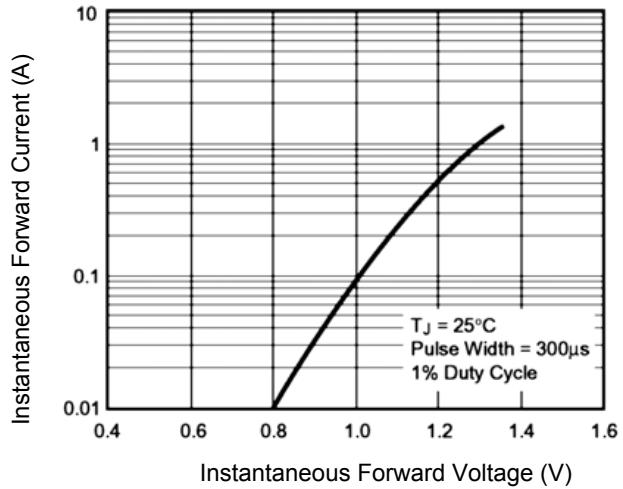


Figure 3. Typical Instantaneous Forward Characteristics

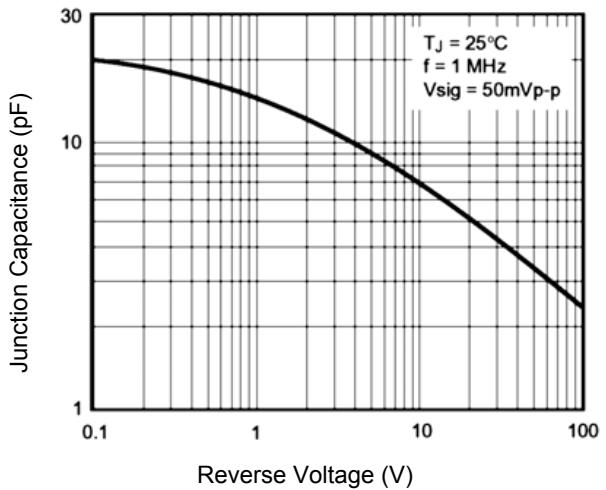
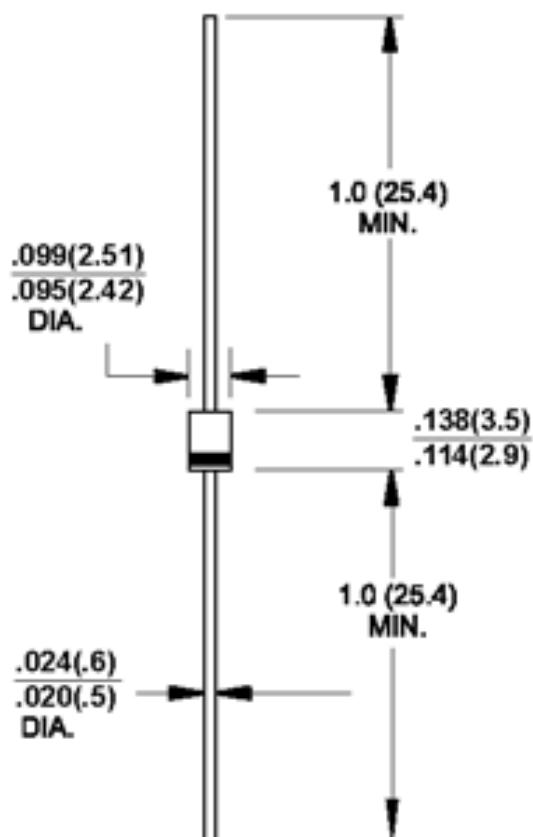


Figure 4. Typical Junction Capacitance

Package Outline Dimensions

R-1



Dimensions in inches and (millimeters)