



# FR15, GHR16

Photoflash Rectifiers  
Reverse Voltage 1500-1600 Volts Forward Current 0.3/0.5 Ampere

## Features

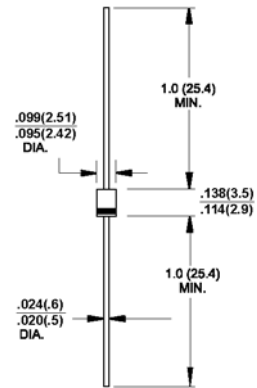
- ◆ Fast switching
- ◆ Low leakage
- ◆ High forward surge current capability



R-1

## Mechanical Data

- ◆ Case: R-1 molded epoxy with UL94V-0 flammability classification
- ◆ Polarity: Color band denotes cathode end
- ◆ Weight: 0.0073 ounce, 0.2 gram
- ◆ Terminals: High temperature soldering guaranteed: 260°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension



Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

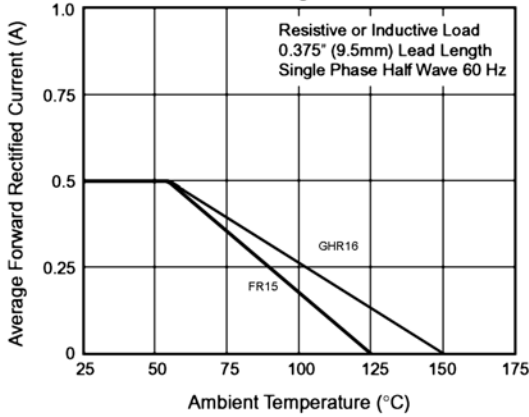
Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	FR15	GHR16	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	1500	1600	Volts
Maximum RMS voltage	$V_{RMS}$	1050	1120	Volts
Maximum DC blocking voltage	$V_{DC}$	1500	1600	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=55^\circ\text{C}$	$I_{F(AV)}$	300	500	mAmps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	15.0	20.0	Amps
Maximum full load reverse current, full cycle average, 0.375" (9.5mm) lead length at $T_A=55^\circ\text{C}$	$I_{R(AV)}$	-	100	$\mu\text{A}$
Maximum instantaneous forward voltage drop at 0.5A	$V_F$	1.5		Volts
Maximum DC reverse current at rated DC blocking voltage at $T_A=25^\circ\text{C}$	$I_R$	10.0	5.0	$\mu\text{A}$
Maximum reverse recovery time at $I_F=0.5\text{A}$ , $I_R=1.0\text{A}$ , $I_T=0.25\text{A}$	$t_{rr}$	500	300	ns
Typical junction capacitance at 4.0V, 1MHz	$C_J$	10		pF
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +125	-55 to +150	$^\circ\text{C}$

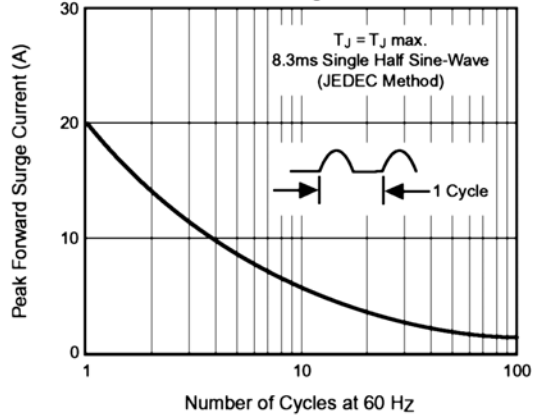
# RATINGS AND CHARACTERISTIC CURVES

( $T_a = 25^\circ\text{C}$  unless otherwise noted)

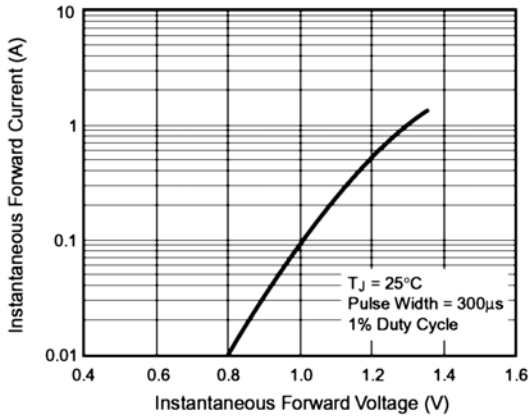
**Fig. 1 – Maximum Forward Current Derating Curve**



**Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current**



**Fig. 3 – Typical Instantaneous Forward Characteristics**



**Fig. 5 – Typical Junction Capacitance**

