



FR15, GHR16

0.3/0.5 Amp. Photoflash Rectifiers
Voltage Range 1500-1600 Volts Forward Current 0.3/0.5 Ampere

Features

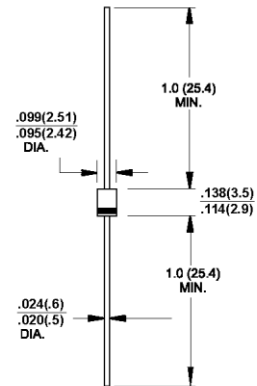
- ◆ Fast switching
- ◆ Low leakage
- ◆ High forward surge current capability



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 $T_L=55^\circ\text{C}$	$I_{R(AV)}$	-	100	μA
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	μA
Maximum reverse recovery time at $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $t_{rr}=0.25\text{A}$	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}	-40 to +125	-65 to +175	$^\circ\text{C}$

RATINGS AND CHARACTERISTIC CURVES

(T_A = 25°C unless otherwise noted)

Fig. 1 – Maximum Forward Current Derating Curve

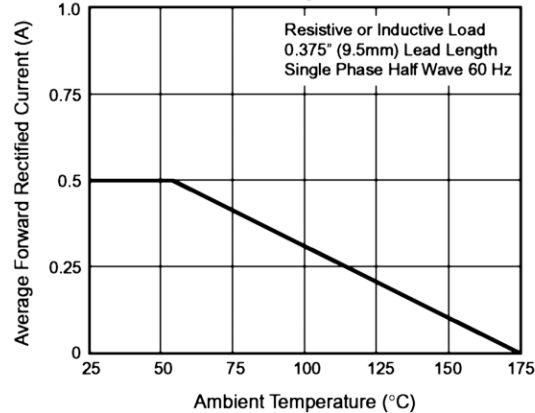


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

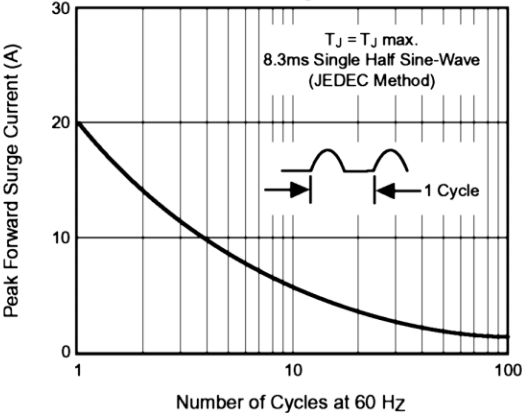


Fig. 3 – Typical Instantaneous Forward Characteristics

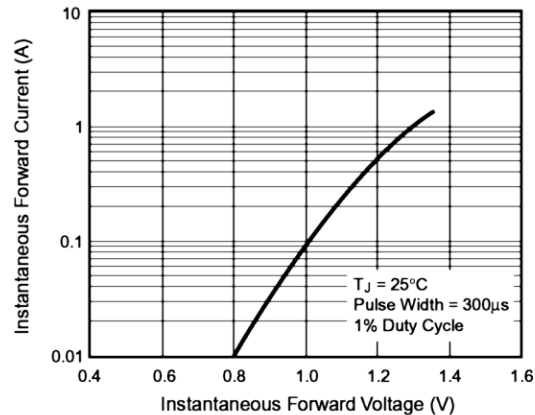


Fig. 5 – Typical Junction Capacitance

