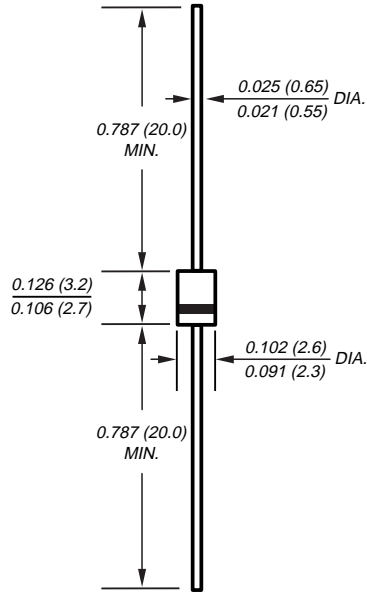



**Case Style R-1**
**Reverse Voltage** 1600V  
**Forward Current** 0.5A

## Photoflash Rectifier



Dimensions in inches and (millimeters)

### Features

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

### Mechanical Data

**Case:** R-1 molded epoxy with UL94V-0 flammability classification

**Polarity:** Color band denotes cathode end

**Weight:** 0.0073 oz., 0.2 g

**Terminals:** High temperature soldering guaranteed: 260°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

### Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

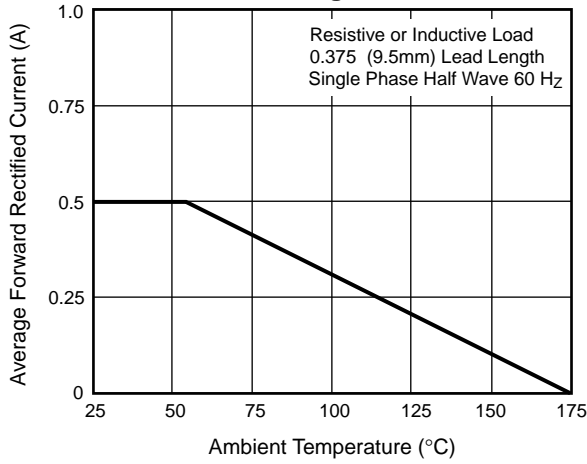
Parameter	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	1600	V
Maximum RMS voltage	V <sub>RMS</sub>	1120	V
Maximum DC blocking voltage	V <sub>DC</sub>	1600	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at T <sub>A</sub> = 55°C	I <sub>F(AV)</sub>	500	mA
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	20	A
Maximum full load reverse current, full cycle average, 0.375" (9.5mm) lead length at T <sub>L</sub> = 55°C	I <sub>R(AV)</sub>	100	μA
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +175	°C

### Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

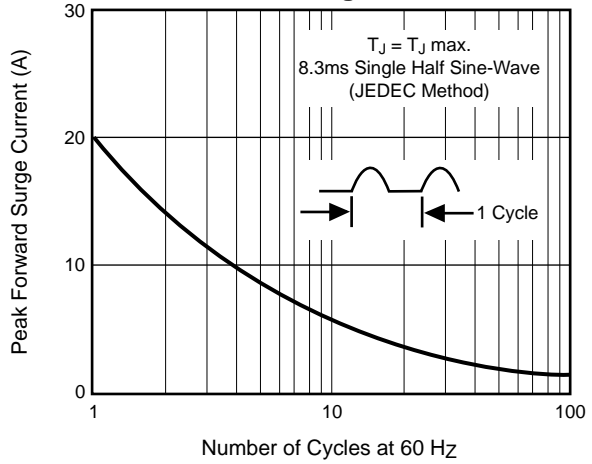
Parameter	Symbol	Value	Unit
Maximum instantaneous forward voltage drop at 0.5A	V <sub>F</sub>	1.5	V
Maximum DC reverse current at Rated DC blocking voltage at T <sub>A</sub> = 25°C	I <sub>R</sub>	5.0	μA
Maximum reverse recovery time at I <sub>F</sub> = 0.5A, I <sub>R</sub> = 1.0A, I <sub>rr</sub> = 0.25A	t <sub>rr</sub>	300	ns
Typical junction capacitance at 4.0V, 1MHz	C <sub>J</sub>	10	pF

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

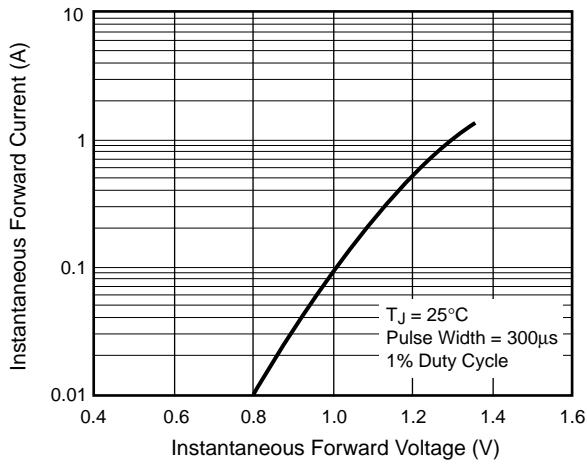
**Fig. 1 – Maximum Forward Current Derating Curve**



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



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



**Fig. 5 – Typical Junction Capacitance**

