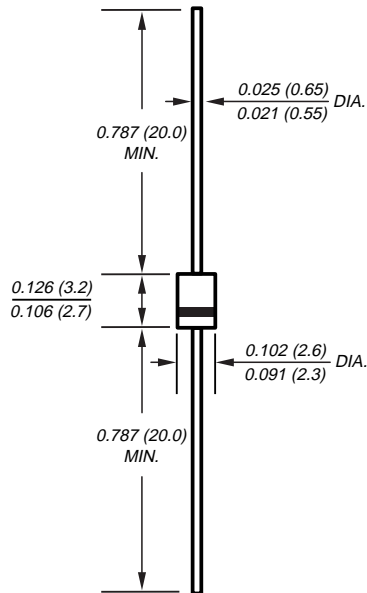



Case Style R-1

Photoflash Rectifier

Reverse Voltage 1600V
Forward Current 0.5A


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 _{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 at T _A = 55°C	I _{F(AV)}	500	mA
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	20	A
Maximum full load reverse current, full cycle average, 0.375" (9.5mm) lead length at T _L = 55°C	I _{R(AV)}	100	μA
Operating junction and storage temperature range	T _J , T _{STG}	-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 _F	1.5	V
Maximum DC reverse current at Rated DC blocking voltage at T _A = 25°C	I _R	5.0	μA
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

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

Fig. 1 – Maximum Forward Current Derating Curve

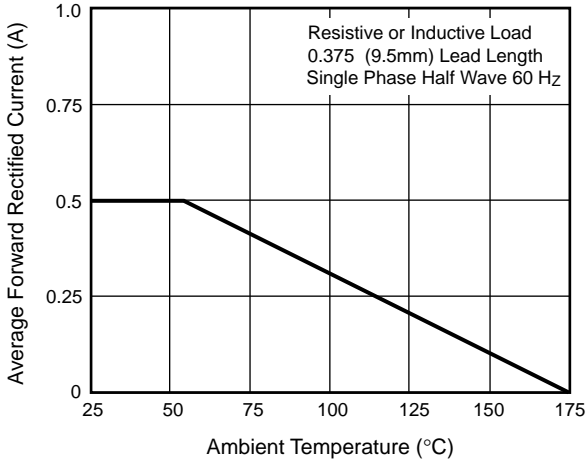


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

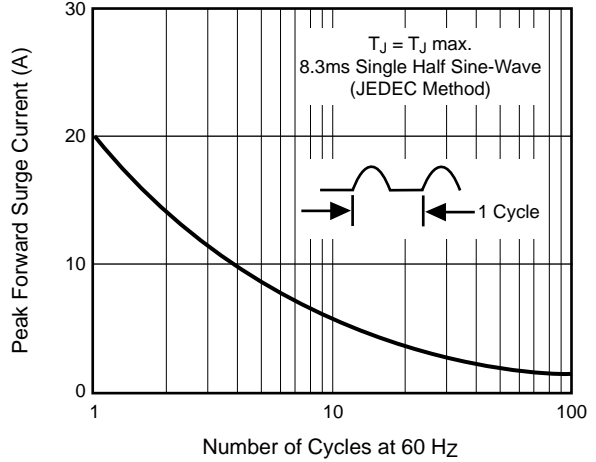


Fig. 3 – Typical Instantaneous Forward Characteristics

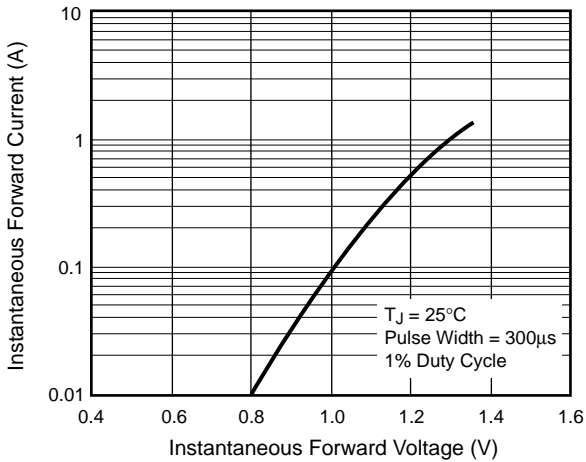


Fig. 5 – Typical Junction Capacitance

