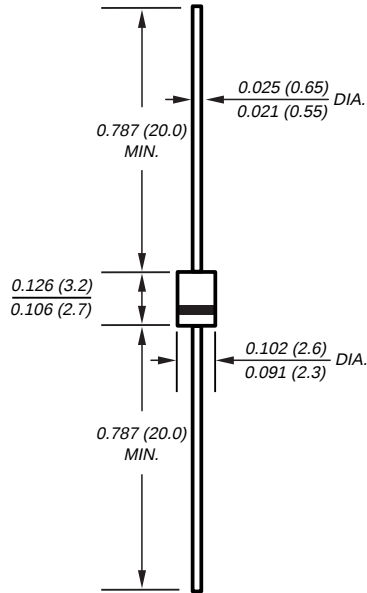


Case Style R-1

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 $T_A = 55^\circ\text{C}$	$I_{F(AV)}$	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 $T_L = 55^\circ\text{C}$	$I_{R(AV)}$	100	μA
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +175	$^\circ\text{C}$

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 $T_A = 25^\circ\text{C}$	I_R	5.0	μA
Maximum reverse recovery time at $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$	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

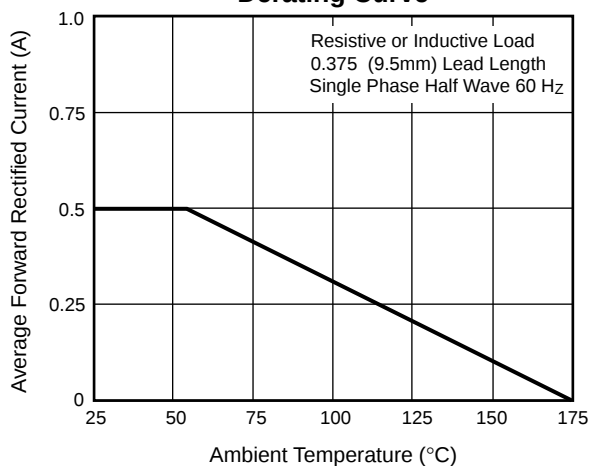


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

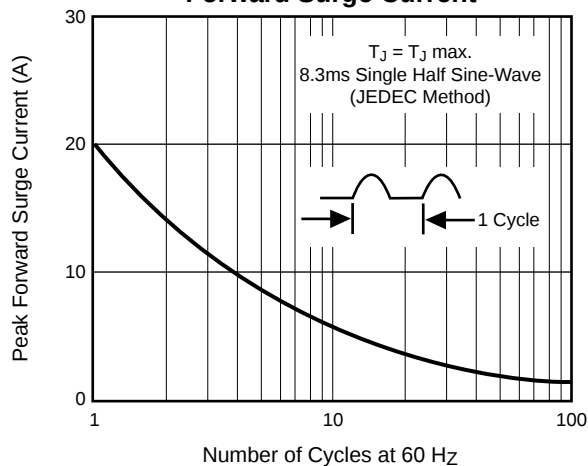


Fig. 3 – Typical Instantaneous Forward Characteristics

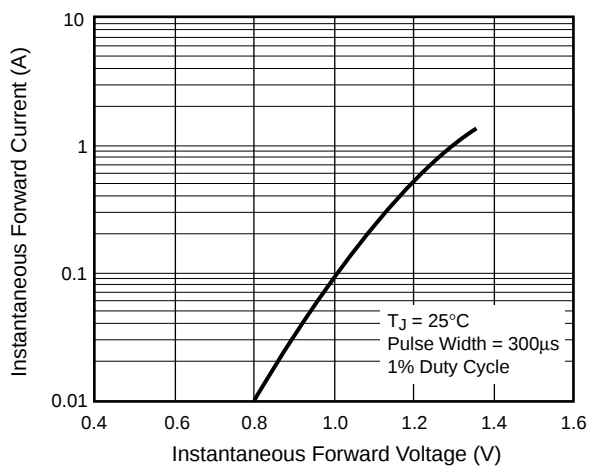


Fig. 5 – Typical Junction Capacitance

