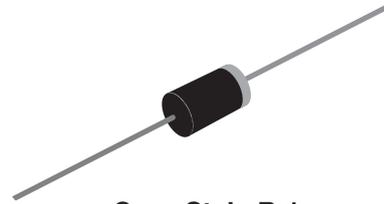


Photoflash Rectifier

Major Ratings and Characteristics

$I_{F(AV)}$	500 mA
V_{RRM}	1600 V
I_{FSM}	20 A
V_F	1.5 V
t_{rr}	300 ns
$T_j \text{ max.}$	175 °C



Case Style R-1

Features

- Glass passivated chip junction
- Fast switching for high efficiency
- Low leakage current
- High forward surge capability
- Solder Dip 260 °C, 40 seconds



Mechanical Data

Case: R-1

Epoxy meets UL-94V-0 Flammability rating

Terminals: Matte tin plated (E3 Suffix) leads, solderable per J-STD-002B and JESD22-B102D

Polarity: Color band denotes cathode end

Typical Applications

For use in high voltage rectification of photoflash application

Maximum Ratings

($T_A = 25\text{ °C}$ unless otherwise noted)

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" (9.5 mm) lead length at $T_A = 55\text{ °C}$	$I_{F(AV)}$	500	mA
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	20	A
Maximum full load reverse current, full cycle average, 0.375" (9.5 mm) lead length at $T_L = 55\text{ °C}$	$I_{R(AV)}$	100	μA
Operating junction and storage temperature range	T_J, T_{STG}	- 65 to + 175	°C

Electrical Characteristics

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

Parameter	Test condition	Symbol	Value	Unit
Maximum instantaneous forward voltage drop	at 0.5 A	V_F	1.5	V
Maximum DC reverse current at Rated DC blocking voltage	at $T_A = 25\text{ }^\circ\text{C}$	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 4.0 V, 1 MHz	C_J	10	pF

Ratings and Characteristics Curves

($T_A = 25\text{ }^\circ\text{C}$ unless otherwise specified)

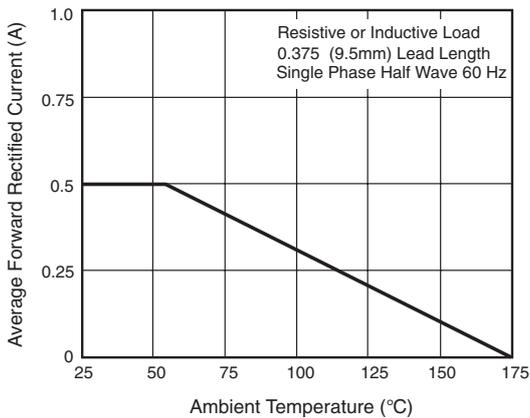


Figure 1. Maximum Forward Current Derating Curve

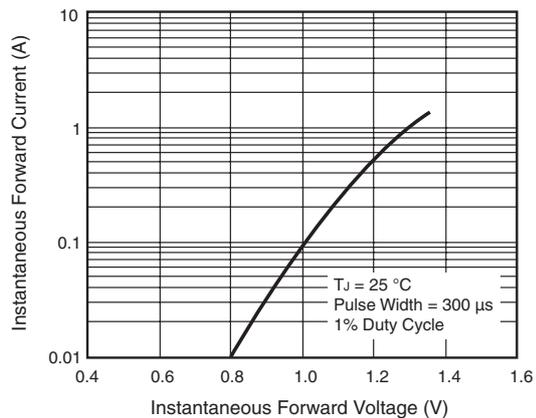


Figure 3. Typical Instantaneous Forward Characteristics

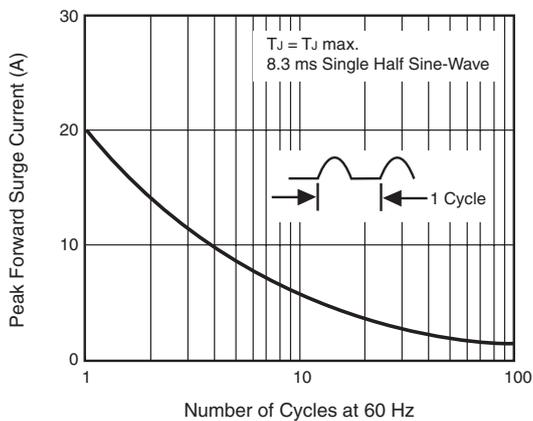


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

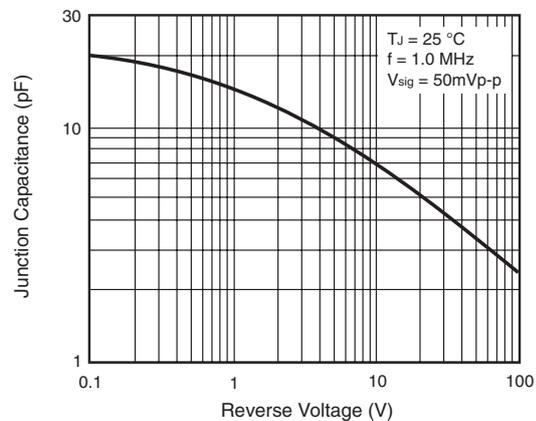
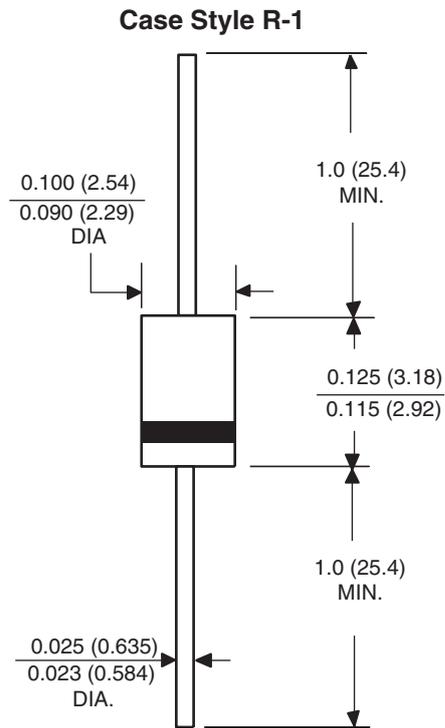


Figure 4. Typical Junction Capacitance

Package outline dimensions in inches (millimeters)





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