

Glass Passivated Silicon Rectifiers

Reverse Voltage 50 to 1000 Volts Forward Current 1.0 Ampere

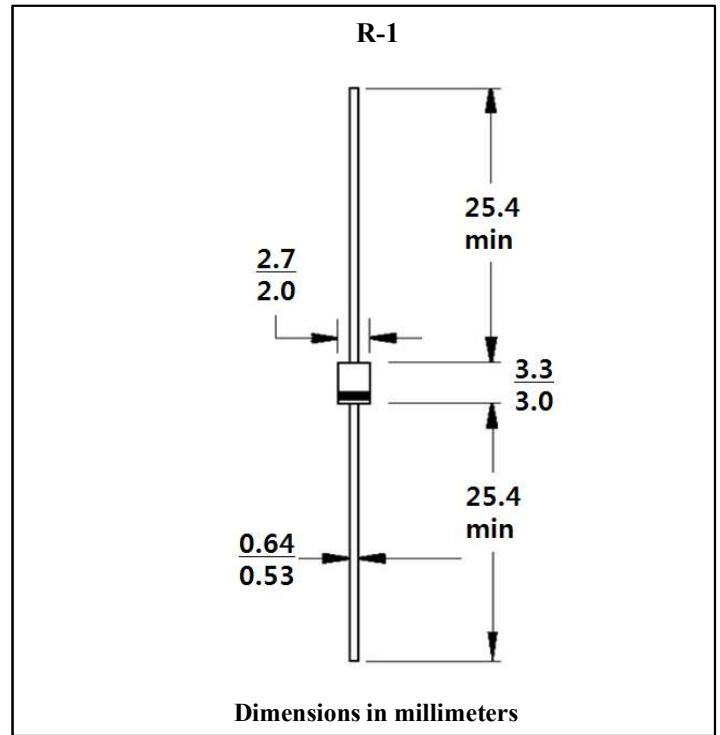
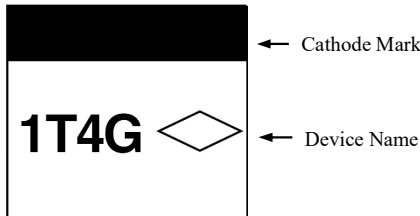
Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- 3mm miniature body

Mechanical Data

- Case : Molded plastic
- Epoxy : UL 94V-0 rate flame retardant
- Lead : Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- Polarity : Color band denotes cathode end
- High temperature soldering guaranteed : 260°C/10 seconds /0.375",(9.5mm) lead lengths at 5 lbs.,(2.3kg) tension
- Weight : 0.2 gram

Marking



Maximum Ratings & Electrical Characteristics (If not specified Ta =25°C)

Parameter	Symbol	1T1G	1T2G	1T3G	1T4G	1T5G	1T6G	1T7G	Unit	Remark
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current 0.375"(9.5mm) Lead Length	$I_{(AV)}$	1.0							A	
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	30							A	
Maximum Instantaneous Forward Voltage @ 1.0A	V_F	1.0							V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5.0							uA	Ta=25°C
		100								Ta=125°C
Typical Junction Capacitance	C_J	10							pF	Note 1
Typical Thermal Resistance	$R_{th(j-a)}$	100							°C /W	Note 2
Operation Junction Temperature Range	T_J	-55 to +150							°C	
Storage Temperature Range	T_{STG}	-55 to +150							°C	

Note 1. Measured at 1MHz and Applied Reverse Voltage of 4.0Volts D.C.

Note 2. Thermal resistance junction to ambient and from junction to lead at 0.375"(9.5mm) lead lengths P.C.B mounted



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

Fig.1 Forward Current Derating Curve

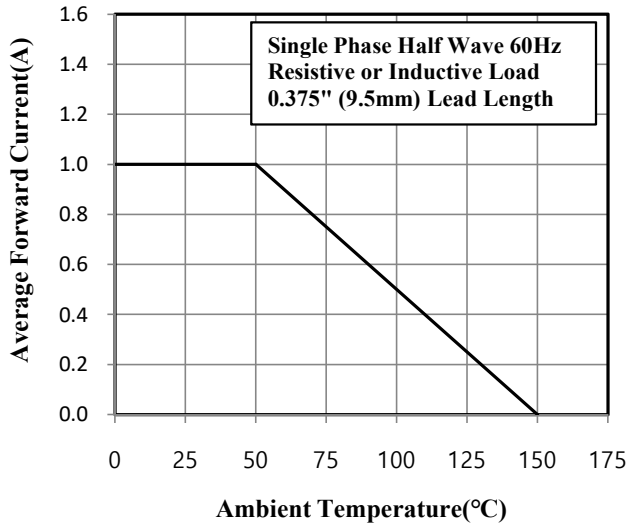


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

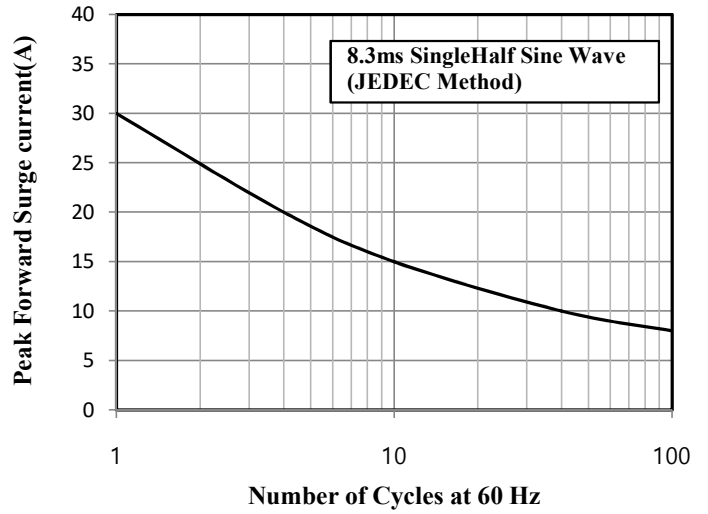


Fig.3 Typical Instantaneous Forward Characteristics

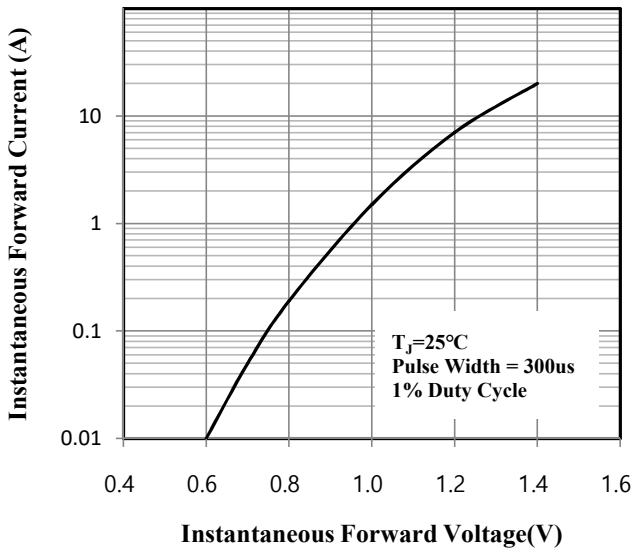


Fig.4 Typical Junction Capacitance

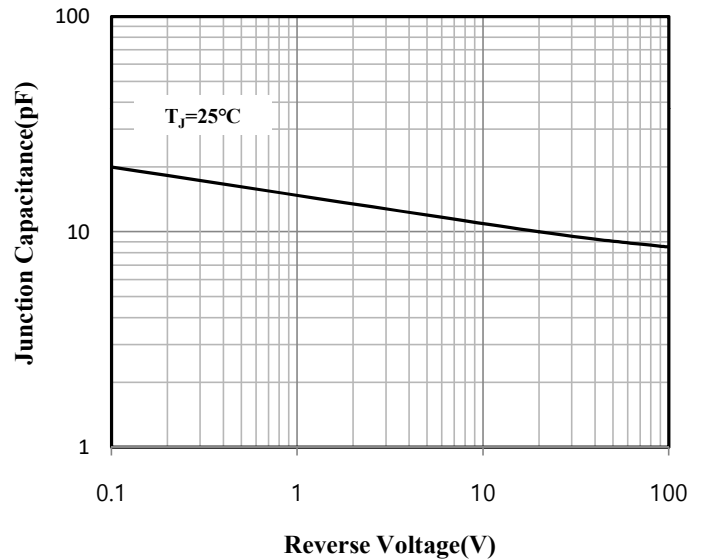


Fig.5 Typical Reverse Characteristics

