

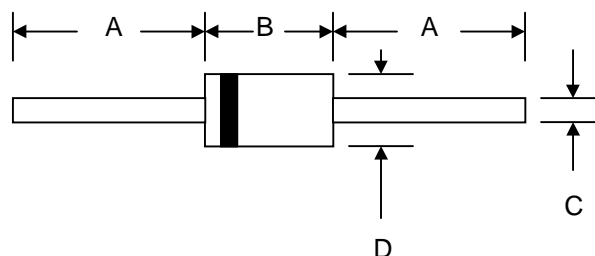
1.0A MINIATURE SILICON RECTIFIER

Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.181 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



R-1		
Dim	Min	Max
A	20.0	—
B	2.00	3.50
C	0.53	0.64
D	2.20	2.60
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	1A1	1A2	1A3	1A4	1A5	1A6	1A7	Unit
Peak Repetitive Reverse Voltage	V _{RRM}								
Working Peak Reverse Voltage	V _{RWM}	50	100	200	400	600	800	1000	V
DC Blocking Voltage	V _R								
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @T _A = 75°C	I _O	1.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30							A
Forward Voltage @I _F = 1.0A	V _{FM}	1.0							V
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 100°C	I _{RM}	5.0 50							μA
Typical Junction Capacitance (Note 2)	C _j	15							pF
Typical Thermal Resistance Junction to Ambient (Note 1)	R _{θJA}	50							K/W
Operating Temperature Range	T _j	-65 to +125							°C
Storage Temperature Range	T _{STG}	-65 to +150							°C

***Glass passivated forms are available upon request**

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case

2. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0V D.C.

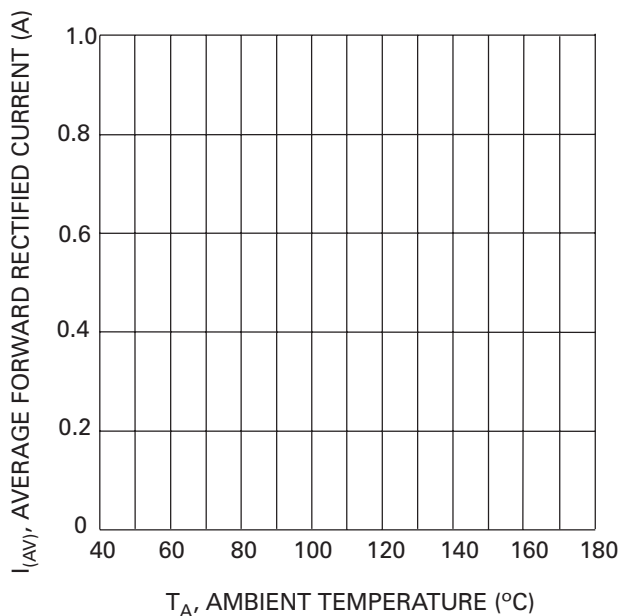


Fig. 1 Forward Current Derating Curve

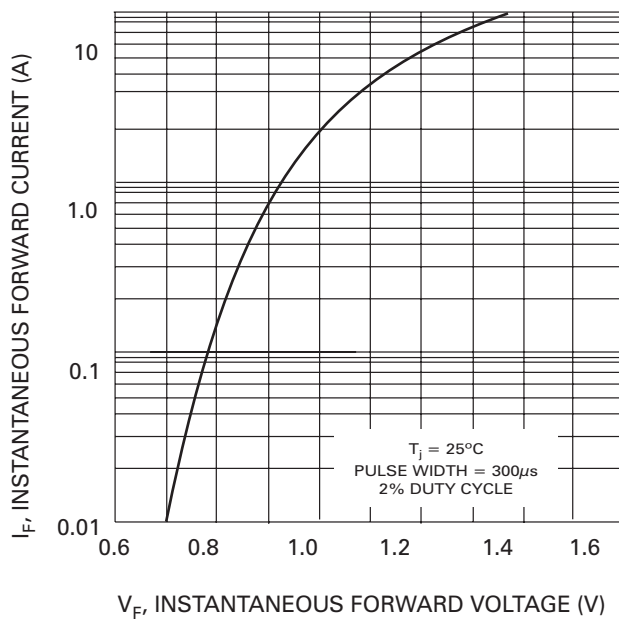


Fig. 2 Typical Forward Characteristics

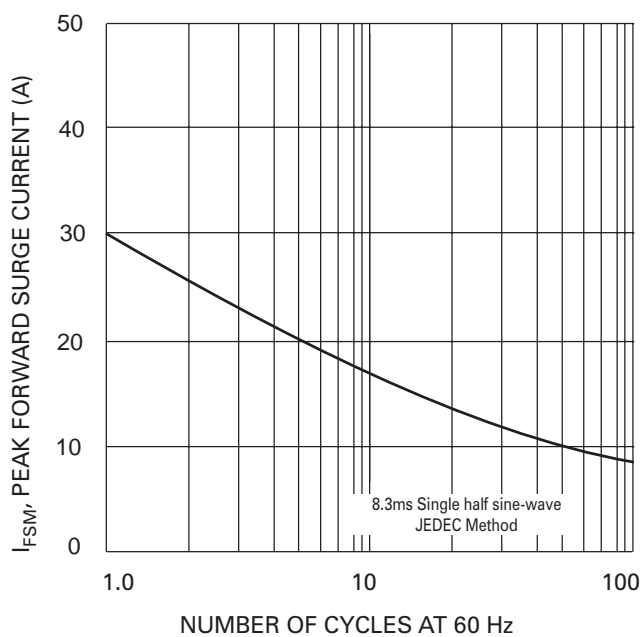


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

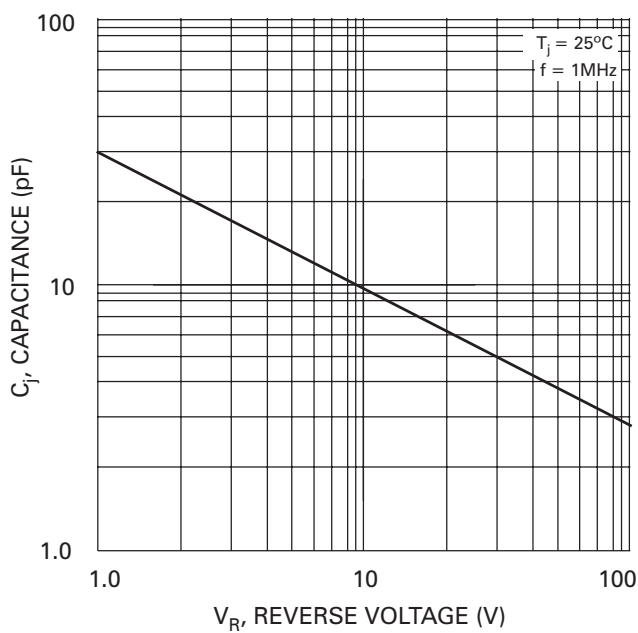


Fig. 4 Typical Junction Capacitance

ORDERING INFORMATION

Product No.◆	Package Type	Shipping Quantity
1A1-T3	R-1	5000/Tape & Reel
1A1-TB	R-1	5000/Tape & Box
1A1	R-1	1000 Units/Box
1A2-T3	R-1	5000/Tape & Reel
1A2-TB	R-1	5000/Tape & Box
1A2	R-1	1000 Units/Box
1A3-T3	R-1	5000/Tape & Reel
1A3-TB	R-1	5000/Tape & Box
1A3	R-1	1000 Units/Box
1A4-T3	R-1	5000/Tape & Reel
1A4-TB	R-1	5000/Tape & Box
1A4	R-1	1000 Units/Box
1A5-T3	R-1	5000/Tape & Reel
1A5-TB	R-1	5000/Tape & Box
1A5	R-1	1000 Units/Box
1A6-T3	R-1	5000/Tape & Reel
1A6-TB	R-1	5000/Tape & Box
1A6	R-1	1000 Units/Box
1A7-T3	R-1	5000/Tape & Reel
1A7-TB	R-1	5000/Tape & Box
1A7	R-1	1000 Units/Box

Products listed in **bold** are WTE **Preferred** devices.

◆T3 suffix refers to a 13" reel. TB suffix refers to Ammo Pack.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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