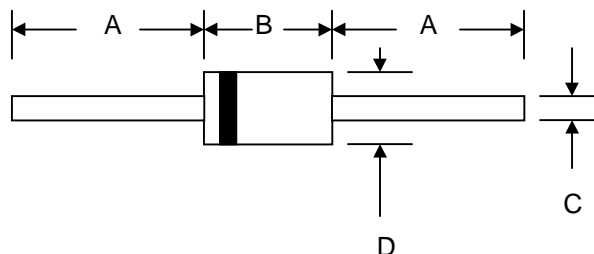


Features

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

Mechanical Data

- Case: R-1, 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
- **Lead Free: For RoHS / Lead Free Version, Add “-LF” Suffix to Part Number, See Page 4**



R-1		
Dim	Min	Max
A	20.0	—
B	2.90	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 Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RFWM} V _R	50	100	200	400	600	800	1000	V
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							°C/W
Operating Temperature Range	T _j	-65 to +125							°C
Storage Temperature Range	T _{STG}	-65 to +150							°C

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.

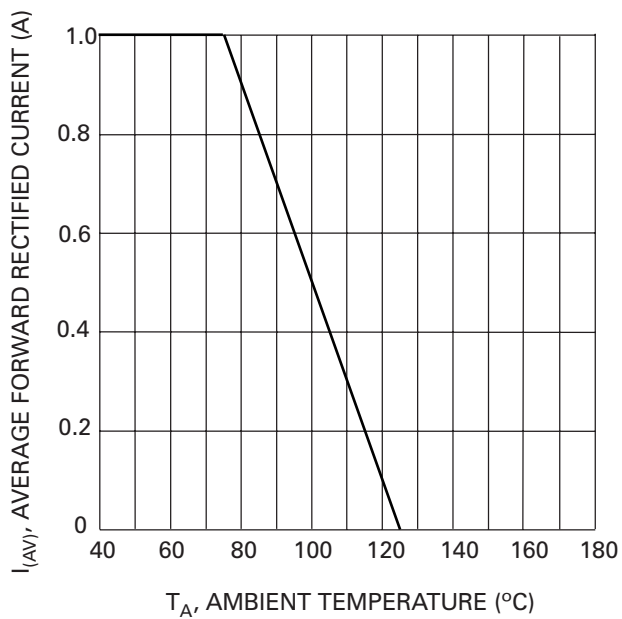


Fig. 1 Forward Current Derating Curve

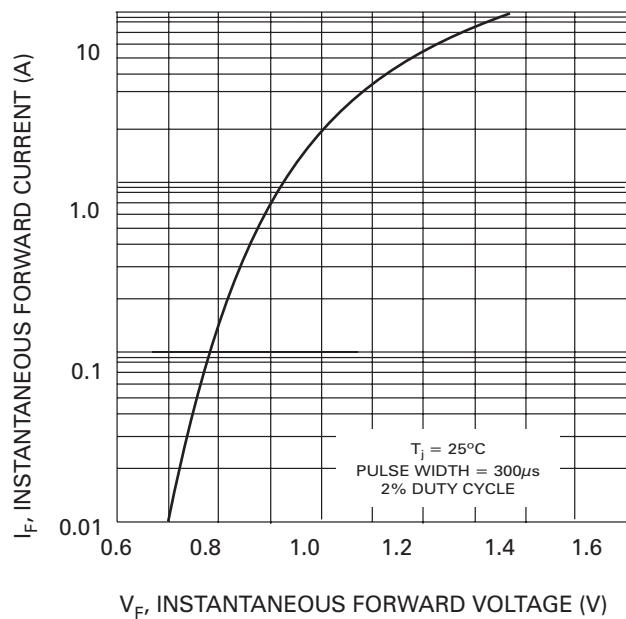


Fig. 2 Typical Forward Characteristics

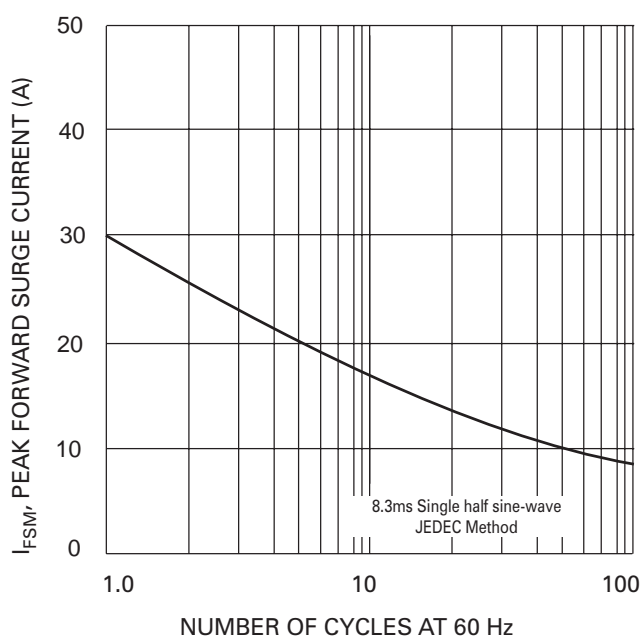


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

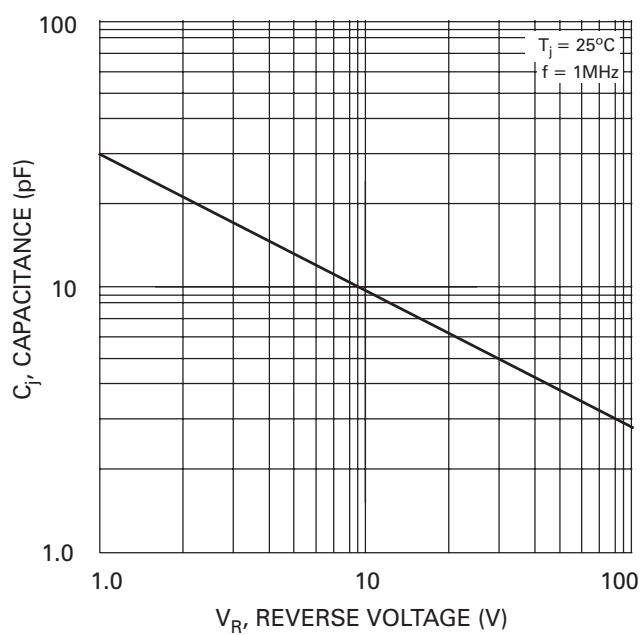
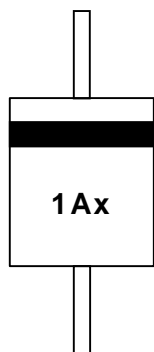


Fig. 4 Typical Junction Capacitance

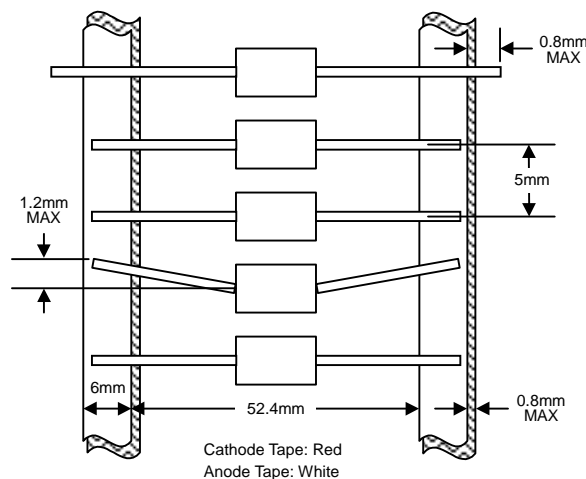
MARKING INFORMATION



Cathode
1Ax
x

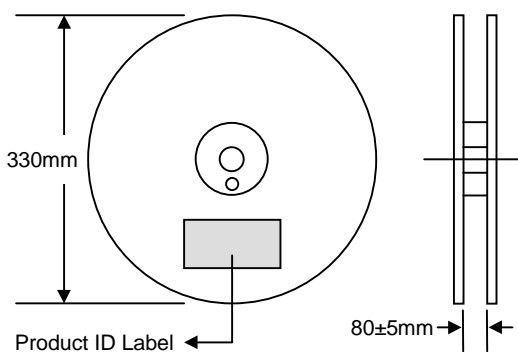
= Polarity Band
= Device Number
= 1, 2, 3, 4, 5, 6 or 7

TAPING SPECIFICATIONS

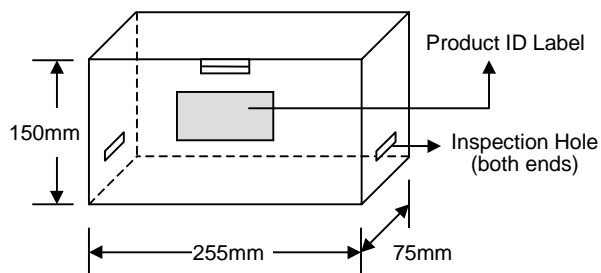


PACKAGING INFORMATION

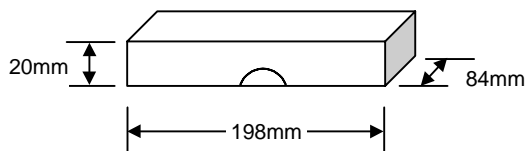
TAPE & REEL



TAPE & BOX



BULK



Packaging	Reel Diameter / Box Size (mm)	Quantity (PCS)	Carton Size (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
TAPE & REEL	330	5,000	370 x 370 x 420	25,000	9.0
TAPE & BOX	255 x 75 x 150	5,000	400 x 273 x 415	50,000	20.0
BULK	198 x 84 x 20	1,000	459 x 214 x 256	50,000	18.5

Note: 1. Paper reel, white or gray color. Core material: plastic or metal.
2. Components are packed in accordance with EIA standard RS-296-E.

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

1. Products listed in **bold** are WTE **Preferred** devices.
2. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
3. **To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, 1A1-TB-LF.**

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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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We power your everyday.