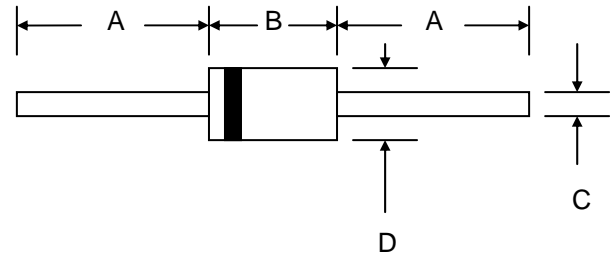


### Features

- Diffused Junction
- Low Forward Voltage Drop
- High Surge Current Capability
- High Reliability
- Ideally Suited for Use in High Frequency SMPS, Inverters and As Free Wheeling Diodes



### 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**

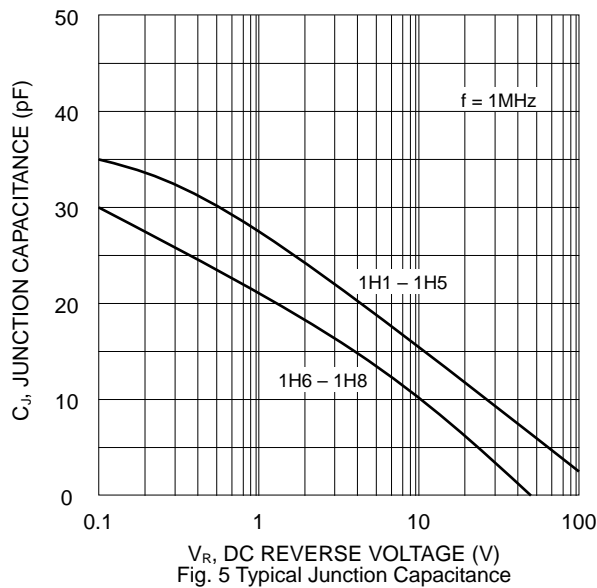
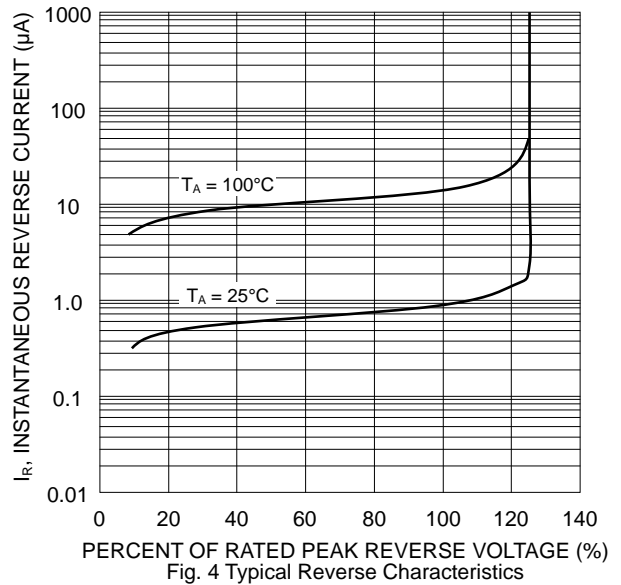
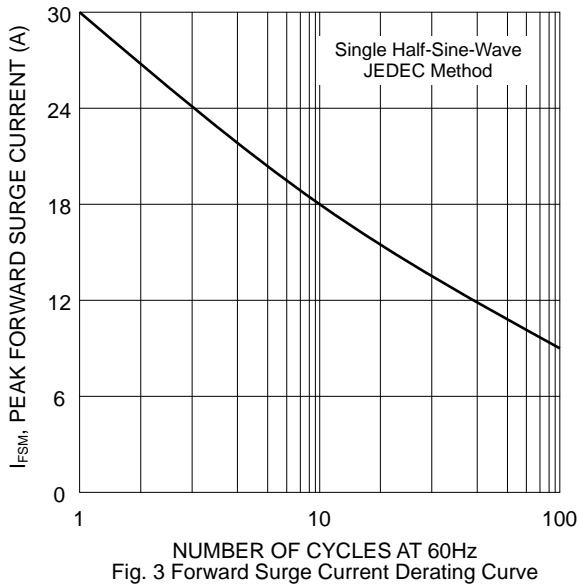
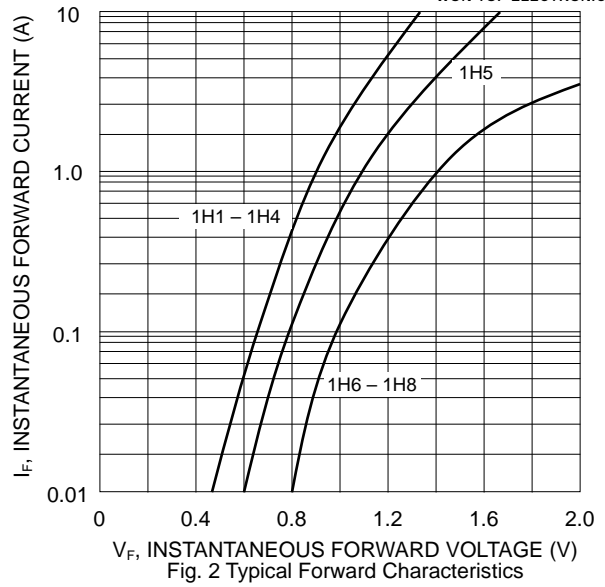
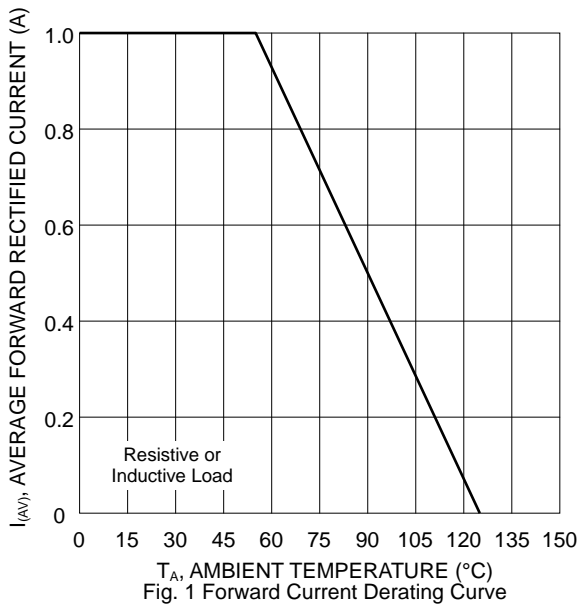
R-1		
Dim	Min	Max
A	20.0	—
B	2.90	3.50
C	0.53	0.64
D	2.20	2.60
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

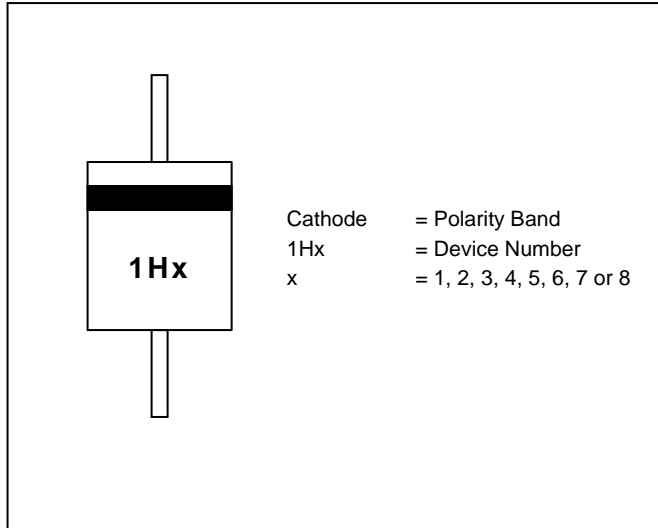
Single Phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

Characteristic	Symbol	1H1	1H2	1H3	1H4	1H5	1H6	1H7	1H8	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	50	100	200	300	400	600	800	1000	V
Working Peak Reverse Voltage	V <sub>RWM</sub>									
DC Blocking Voltage	V <sub>R</sub>									
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	210	280	420	560	700	V
Average Rectified Output Current (Note 1) @T <sub>A</sub> = 55°C	I <sub>O</sub>	1.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	30								A
Forward Voltage @I <sub>F</sub> = 1.0A	V <sub>FM</sub>	1.0			1.3		1.7			V
Peak Reverse Current @T <sub>A</sub> = 25°C At Rated DC Blocking Voltage @T <sub>A</sub> = 100°C	I <sub>RM</sub>	5.0				100				μA
Reverse Recovery Time (Note 2)	t <sub>rr</sub>	50				75				nS
Typical Junction Capacitance (Note 3)	C <sub>J</sub>	20				15				pF
Typical Thermal Resistance Junction to Ambient (Note 1)	R <sub>JA</sub>	60								°C/W
Typical Thermal Resistance Junction to Lead (Note 1)	R <sub>JL</sub>	20								
Operating Temperature Range	T <sub>J</sub>	-65 to +125								°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150								°C

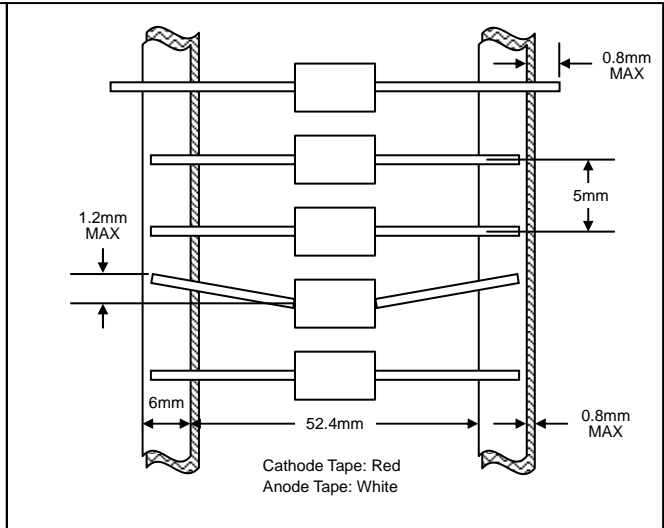
- Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.  
2. Measured with I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>RR</sub> = 0.25A.  
3. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0V D.C.



## MARKING INFORMATION

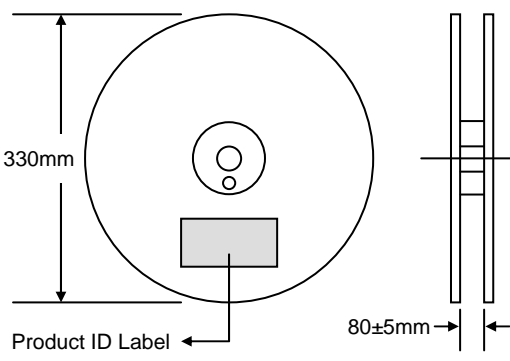


## TAPING SPECIFICATIONS



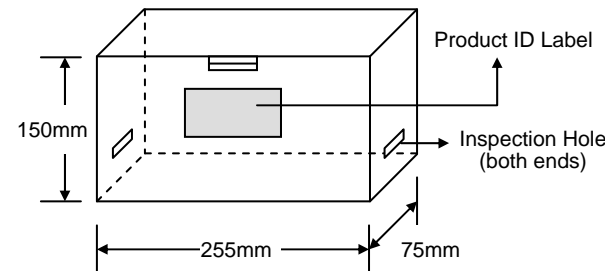
## PACKAGING INFORMATION

### TAPE & REEL



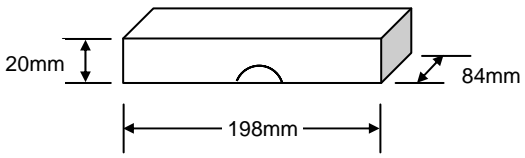
330mm  
 Product ID Label  
 80±5mm

### TAPE & BOX



Product ID Label  
 Inspection Hole (both ends)  
 150mm  
 255mm  
 75mm

### BULK



20mm  
 198mm  
 84mm


Packaging	Reel Diameter / Box Size (mm)	Quantity (PCS)	Carton Size (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
<b>TAPE &amp; REEL</b>	330	5,000	370 x 370 x 420	25,000	9.0
<b>TAPE &amp; BOX</b>	255 x 75 x 150	5,000	400 x 273 x 415	50,000	20.0
<b>BULK</b>	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
1Hx-T3	R-1	5000/Tape & Reel
<b>1Hx-TB</b>	R-1	5000/Tape & Box
1Hx	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, 1H1-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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