

# 1.0A ULTRAFAST DIODE



#### **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

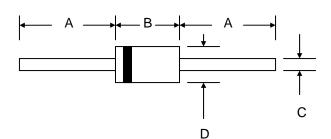
 Terminals: Plated Leads Solderable per MIL-STD-202, Method 208

Polarity: Cathode Band

Weight: 0.181 grams (approx.)

Mounting Position: AnyMarking: Type Number

Lead Free: For RoHS / Lead Free Version,
 Add "-LF" Suffix to Part Number, See Page 4



R-1				
Dim	Min	Max		
Α	20.0	_		
В	2.90	3.50		
C	0.53	0.64		
D	2.20	2.60		
All Dimensions in mm				

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

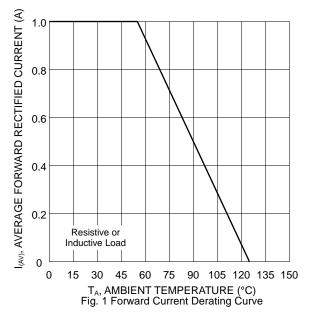
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

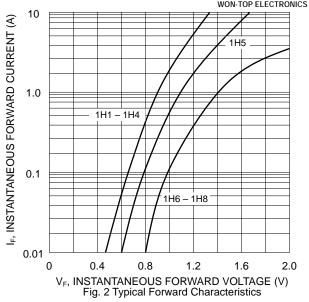
Characteristic	Symbol	1H1	1H2	1H3	1H4	1H5	1H6	1H7	1H8	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	50	100	200	300	400	600	800	1000	٧
RMS Reverse Voltage	VR(RMS)	35	70	140	210	280	420	560	700	٧
Average Rectified Output Current (Note 1) @T <sub>A</sub> = 55°C	lo	1.0						Α		
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM	30						А		
Forward Voltage @I <sub>F</sub> = 1.0A	VFM	1.0 1.3		1.7			٧			
	IRM	5.0 100				μΑ				
Reverse Recovery Time (Note 2)	t <sub>rr</sub>			50				75		nS
Typical Junction Capacitance (Note 3)	CJ	20 15				pF				
Typical Thermal Resistance Junction to Ambient (Note 1) Typical Thermal Resistance Junction to Lead (Note 1)	R JA R JL	60 20						°C/W		
Operating Temperature Range	TJ	-65 to +125						°C		
Storage Temperature Range	Tstg	-65 to +150						°C		

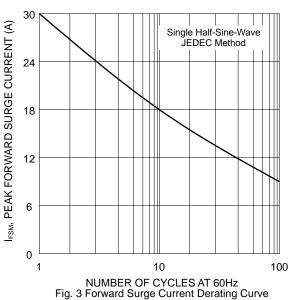
Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.

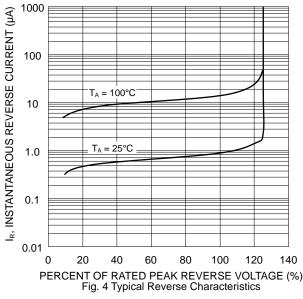
- 2. Measured with  $I_F = 0.5A$ ,  $I_R = 1.0A$ ,  $I_{RR} = 0.25A$ .
- 3. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0V D.C.

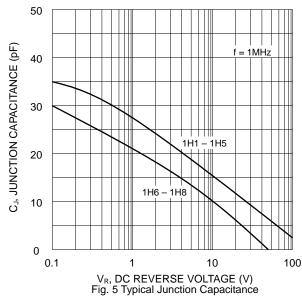








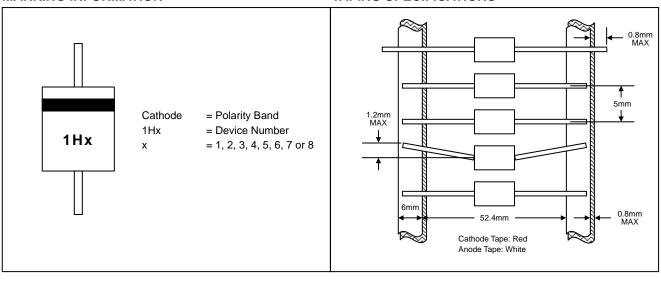


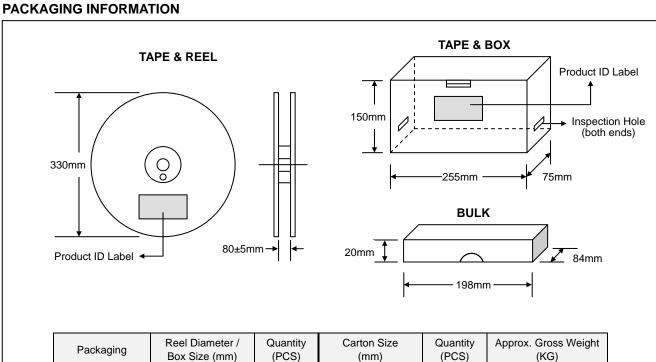




# **MARKING INFORMATION**

# TAPING SPECIFICATIONS





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
1Hx-T3	R-1	5000/Tape & Reel
1Hx-TB	R-1	5000/Tape & Box
1Hx	R-1	1000 Units/Box

- 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.

  To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, 1H1-TB-LF. 3.

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