LiKun-micro electronics

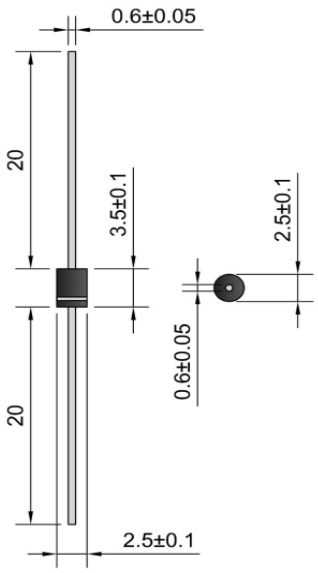
1H1 – 1H8

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

R-1



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**

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	1H1	1H2	1H3	1H4	1H5	1H6	1H7	1H8	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	300	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	210	280	420	560	700	V
Average Rectified Output Current (Note 1) @T_A = 55°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				1.3	1.7			V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 100°C	I_{RM}	5.0 100								μA
Reverse Recovery Time (Note 2)	t_{rr}	50					75			nS
Typical Junction Capacitance (Note 3)	C_J	20					15			pF
Typical Thermal Resistance Junction to Ambient (Note 1) Typical Thermal Resistance Junction to Lead (Note 1)	$R_{\theta JA}$ $R_{\theta JL}$	60 20								°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 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.

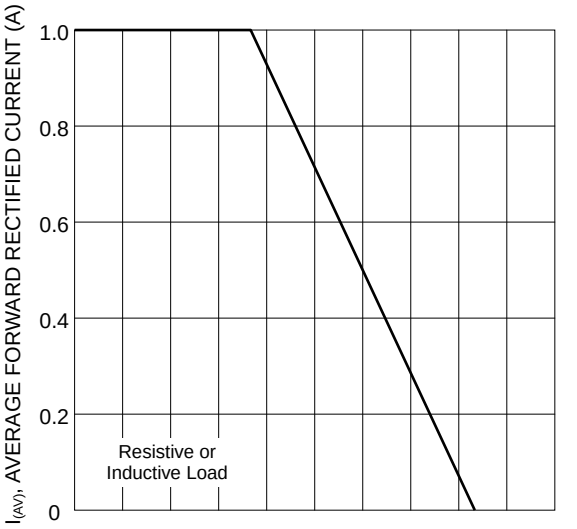


Fig. 1 Forward Current Derating Curve

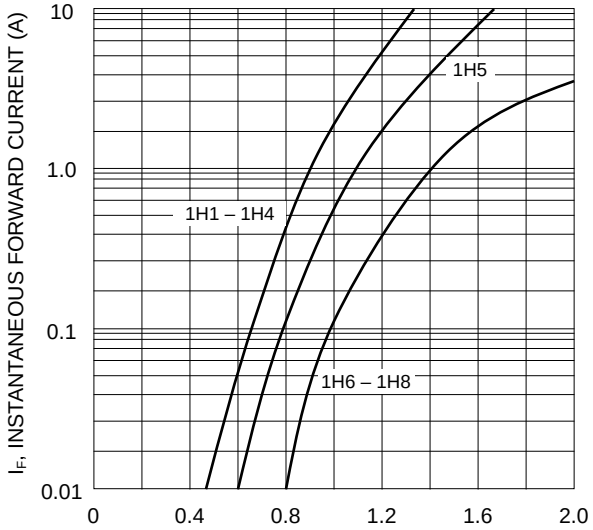


Fig. 2 Typical Forward Characteristics

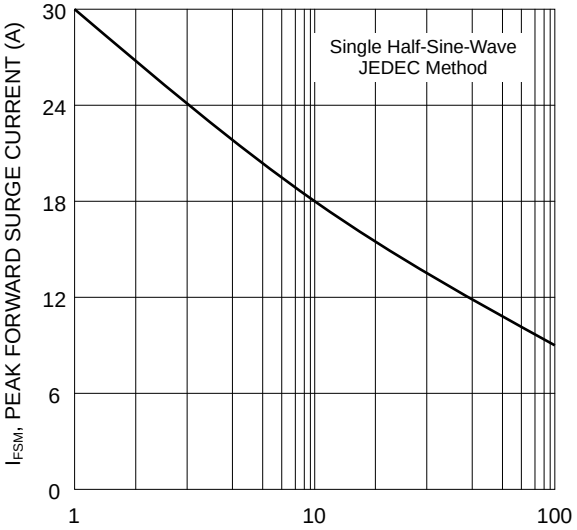


Fig. 3 Forward Surge Current Derating Curve

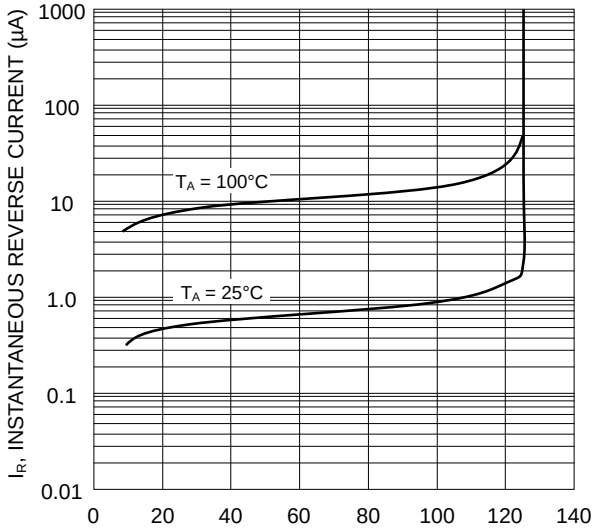


Fig. 4 Typical Reverse Characteristics

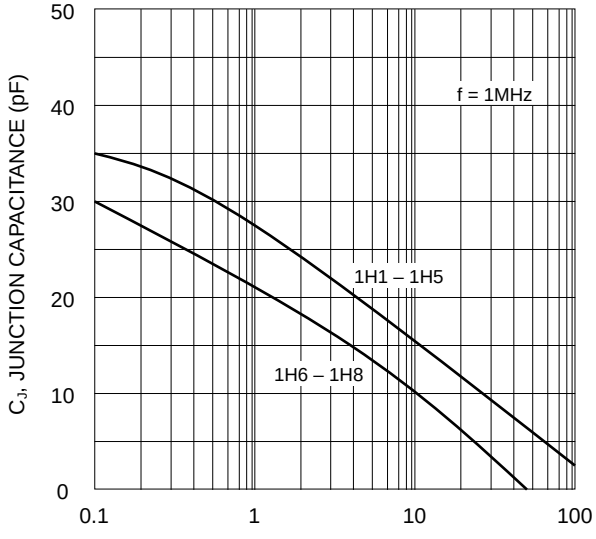
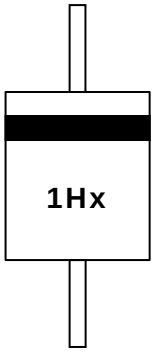


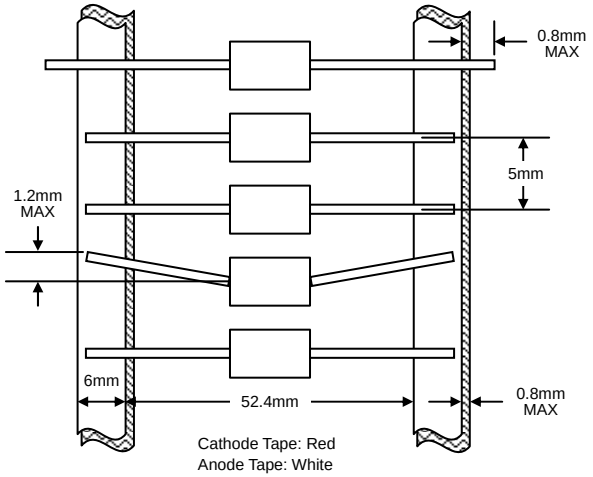
Fig. 5 Typical Junction Capacitance

MARKING INFORMATION



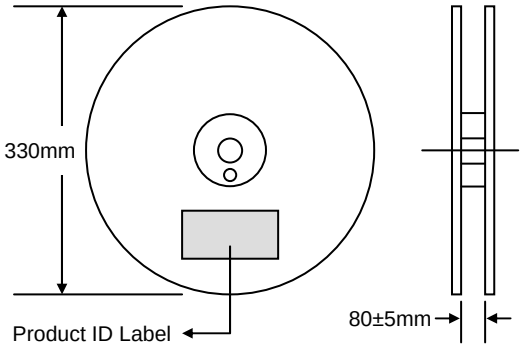
Cathode	= Polarity Band
1Hx	= Device Number
x	= 1, 2, 3, 4, 5, 6, 7 or 8

TAPING SPECIFICATIONS

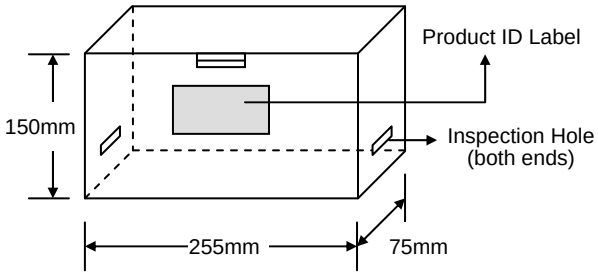


PACKAGING INFORMATION

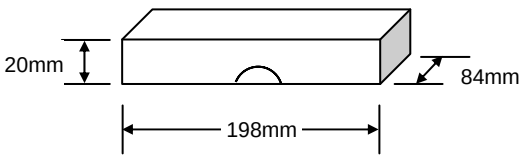
TAPE & REEL



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