

1A GLASS PASSIVATED SILICON RECTIFIERS

1A1G to 1A7G



R-1

Axial Lead

Plastic Package

Polarity : Colour band denotes cathode end

FEATURES

- 1). Low Reverse Leakage Current
- 2). High Forward Surge Current Capability
- 3). The Plastic Package Carries Underwriters Laboratory Flammability Classification 94V-O.
- 4). Glass Passivated Chip Junction
- 5). Construction Utilizes Void-Free Molded Plastic Technique
- 6). High Temperature Soldering Guaranteed :
260°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs (2.3Kg) tension
- 7). Weight : 0.20grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at $T_A=25^\circ\text{C}$ Ambient Temperature unless otherwise specified.)

Single Phase, Half Wave 60Hz, Resistive or Inductive Load, for Capacitive Load, Derate Current by 20%.

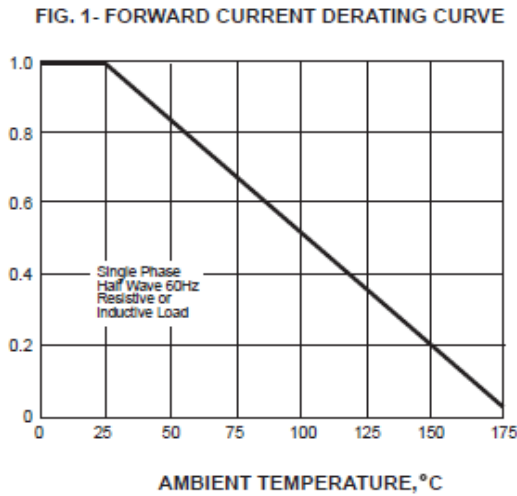
CHARACTERISTICS	SYMBOL	1A1G	1A2G	1A3G	1A4G	1A5G	1A6G	1A7G	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 0.375"(9.5mm) Lead Length at	$I_{(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms Single Half Sine -Wave Superimposed on Rated Load	I_{FSM}	30							A
Maximum Instantaneous Forward Voltage at 1.0A	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ\text{C}$	I_{R1}							μA
	$T_A=100^\circ\text{C}$	I_{R2}							μA
Typical Junction Capacitance (Note 1)	C_j	15							pF
Typical Thermal Resistance (Note 2)	$R_{\theta J-A}$	50							$^\circ\text{C/W}$
Operating Junction and Storage Temperature Range	T_J, T_{stg}	-55 to +150							$^\circ\text{C}$

Note 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

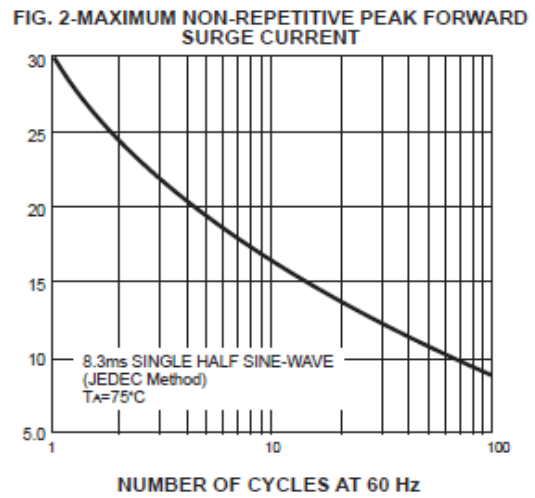
Note 2. Thermal Resistance Junction to Ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

CHARACTERISTICS CURVES

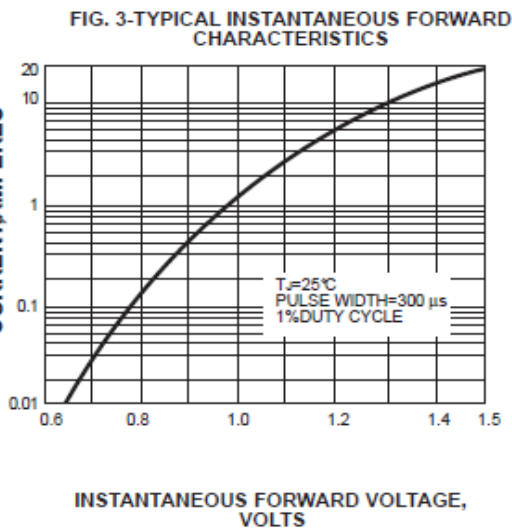
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES



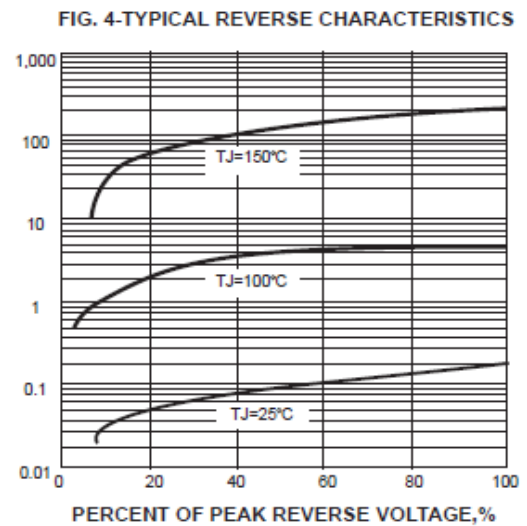
PEAK FORWARD SURGE CURRENT, AMPERES



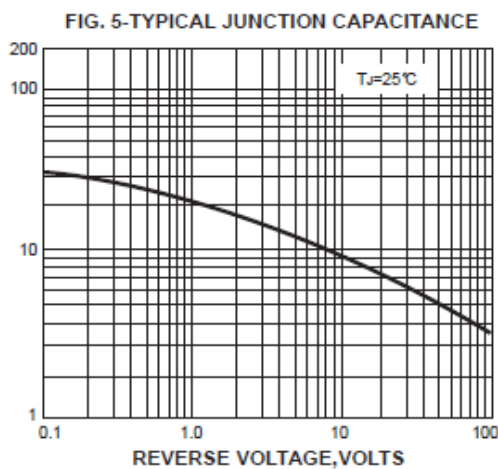
INSTANTANEOUS FORWARD CURRENT, AMPERES



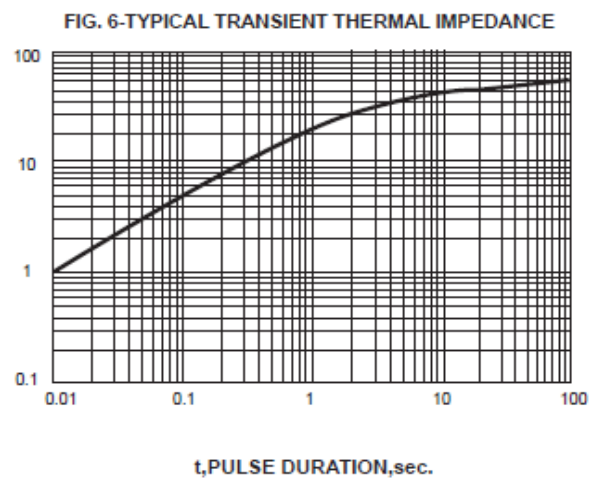
INSTANTANEOUS REVERSE CURRENT, MICROAMPERES



JUNCTION CAPACITANCE, pF

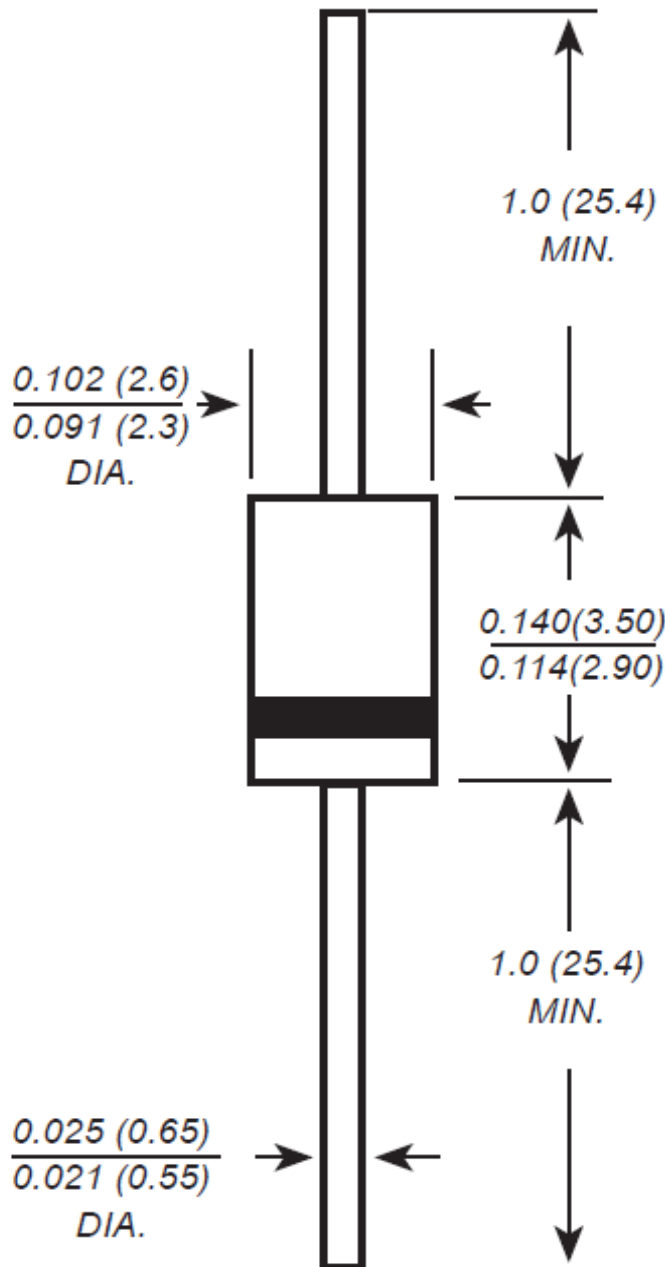


TRANSIENT THERMAL IMPEDANCE, °C/W



PACKAGE OUTLINE AND DIMENSIONS

R-1



Dimensions in inches and (millimeters)



Continental Device India Pvt. Limited

An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company



Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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