

1A SURFACE MOUNT GENERAL PURPOSE RECTIFIER



S1AB TO S1MB

DO-214AA (SMB) Surface Mount Plastic Package

Features :

- 1) The Plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- 2) Low reverse leakage
- 3) High Forward surge current capability
- 4) High temperature soldering guaranteed
260°C/10 seconds at terminals
- 5) Colour Band Denotes Cathode End

ABSOLUTE MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless specified otherwise.

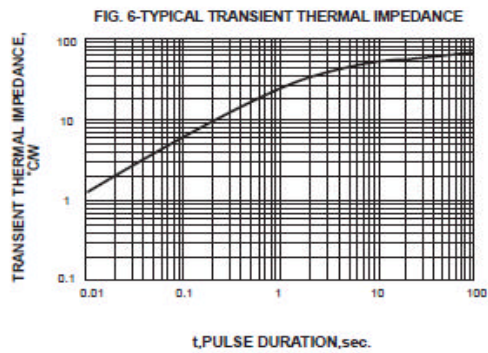
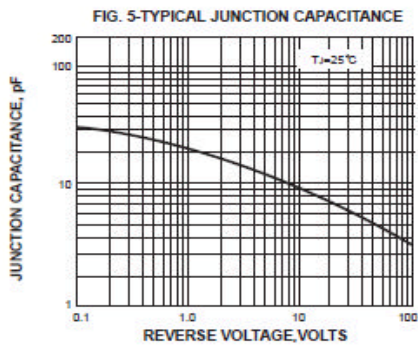
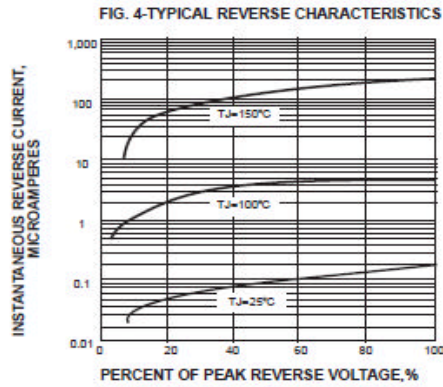
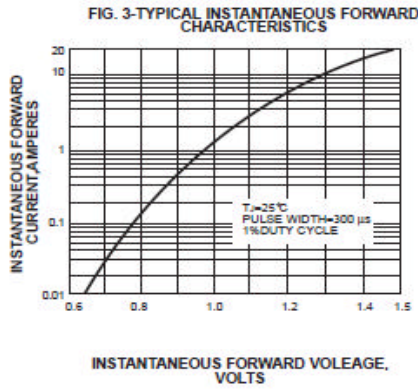
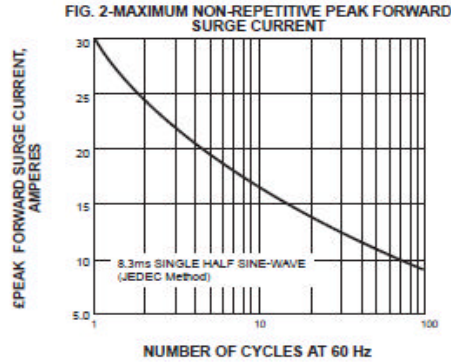
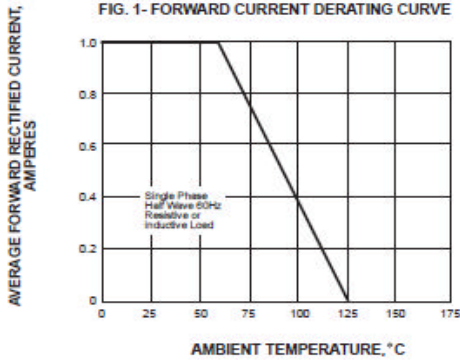
Single phase half-wave 60Hz, resistor inductive load. For capacitive load, derate current by 20%)

DESCRIPTION	SYMBOL	S1AB	S1BB	S1DB	S1GB	S1JB	S1KB	S1MB	UNITS
Maximum Peak repetitive reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at $T_L=110^\circ\text{C}$	$I_{(AV)}$	1.0							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30							Amp
Maximum Instantaneous Forward Voltage at 1.0A	V_F	1.1							Volts
Maximum DC Reverse Current at rated DC Blocking Voltage	I_R	$T_A=25^\circ\text{C}$							μAmp
		$T_A=100^\circ\text{C}$							
Typical Junction Capacitance (Note 1)	C_j	15							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	75							$^\circ\text{C/W}$
Operating Junction Temperature Range	T_j	-55 to +175							$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +175							$^\circ\text{C}$

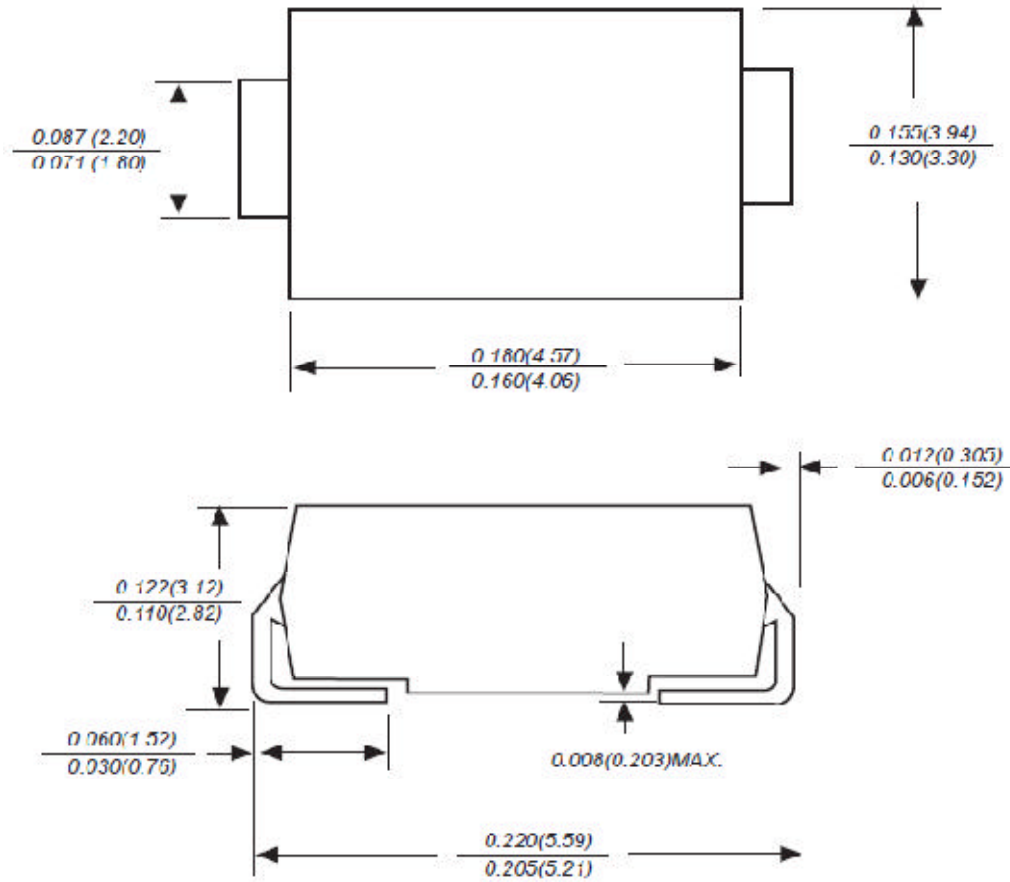
NOTES:

- 1- Measured at 1 MHz and applied reverse voltage of 4.0 V DC.
- 2- P.C.B. mounted with 0.2 X 0.2" (5.0*5.0mm) copper pad areas

RATINGS AND CHARACTERISTICS CURVES



DO-214AA (SMB) Package Outline and Dimension



Dimensions in inches and (millimeters)



Continental Device India Limited

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



Customer Notes

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 Discrete 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).

CDIL strives for continuous improvement and reserves the right to change the specifications of its products without prior notice.



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CIN No. U32109DL1964PLC004291