Continental Device India Limited
An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

SK515 - SK520

DO-214AB (SMC)
Surface Mount
Plastic Package

Colour Band denotes polarity.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25ºC Ambient Temperature unless specified otherwise.

Single phase half-wave 60Hz, Resistive or Inductive Load, for Capacitive Load current derate 20%

DESCRIPTION		SYMBOL	SK515	SK520	UNIT
Maximum Peak Repetitive Reverse Voltage		V_{RRM}	150	200	V
Maximum RMS Voltage		V_{RMS}	105	140	V
Maximum DC Blocking Voltage		V_{DC}	150	200	V
Maximum Average Forward Rectified Current		$I_{(AV)}$	5		A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load		I_{FSM}	150		A
Maximum Instantaneous Forward Voltage I_F=3.0A		V_F	0.95		V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_a=25°C	I_R	1		mA
	T_a=100°C		50		mA
Typical Junction Capacitance (Note : 1)		C_J	300		pF
Thermal Resistance Junction to Ambient		$R_{th\ (j-a)}$	10		ºC/W
Operating Junction Temperature Range		T_j	-55 to +150		ºC
Storage Temperature Range		T_{stg}	-55 to +150		ºC

Note : 1. Measured at MHz and applied reverse voltage of 4.0V D.C.

CHARACTERISTICS CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

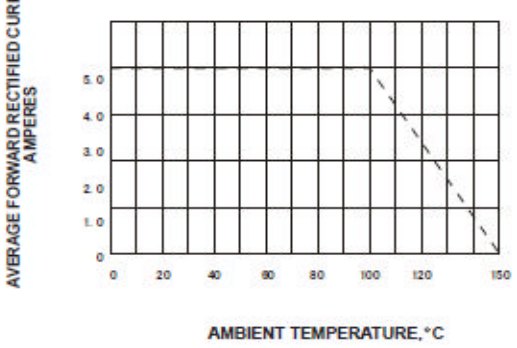


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

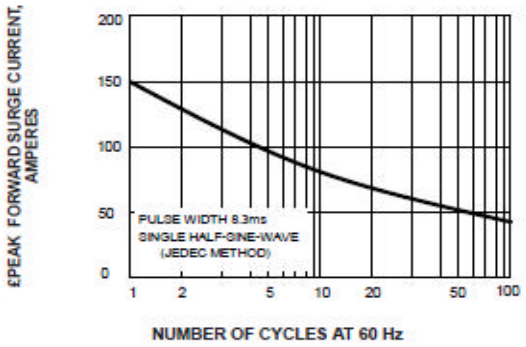


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

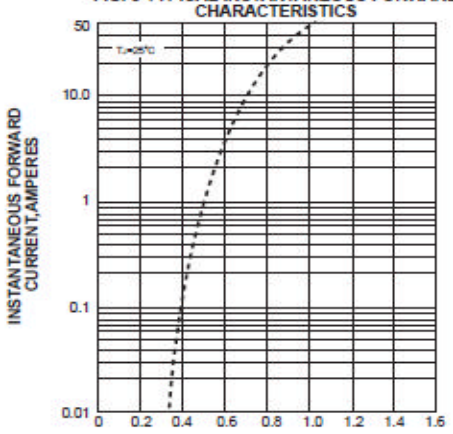


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

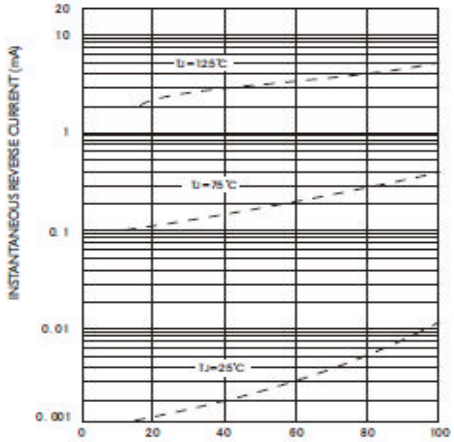


FIG. 5-TYPICAL JUNCTION CAPACITANCE

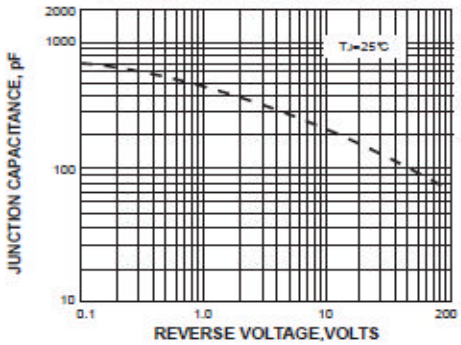
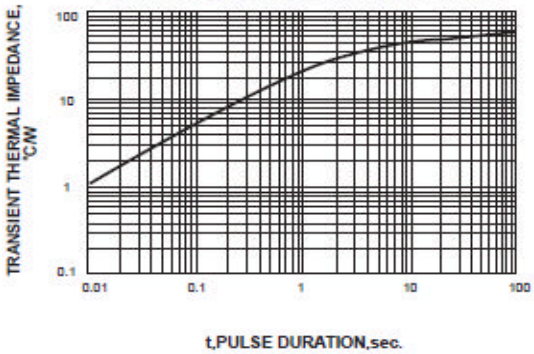
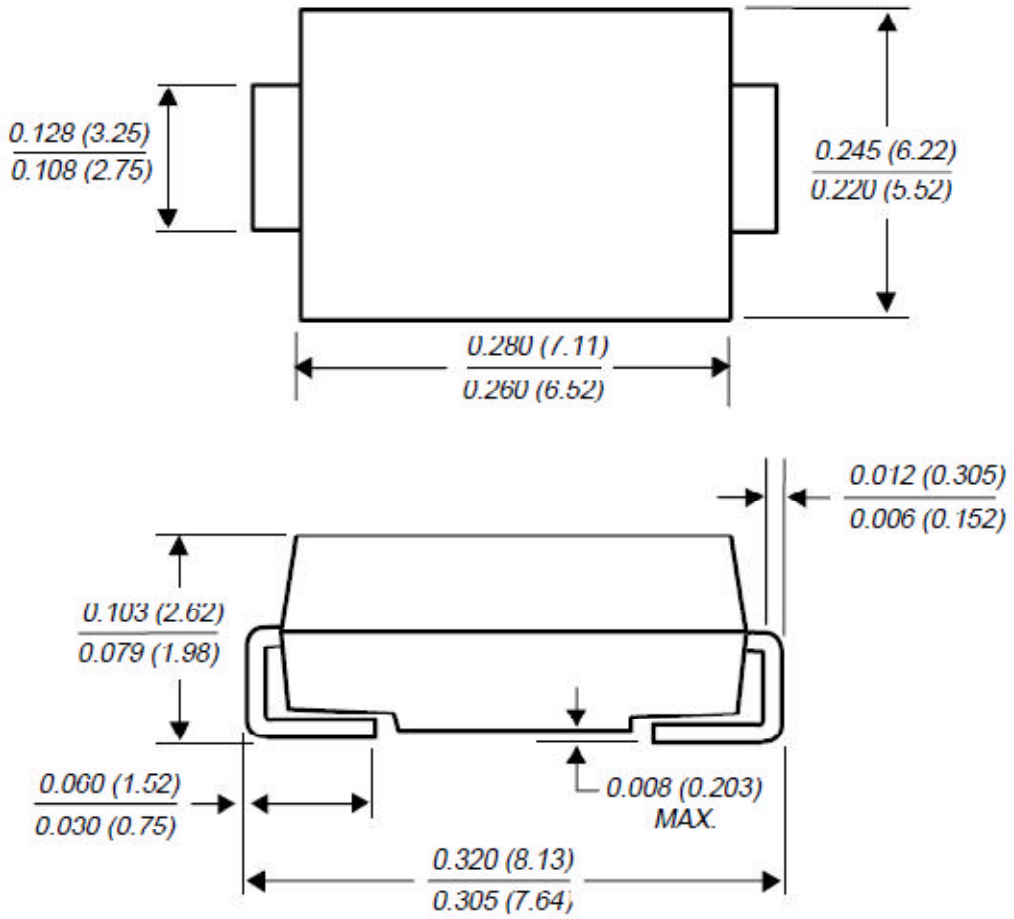


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



DO-214AB (SMC) PACKAGE DIMENSIONS



Dimensions in inches and (millimeters)

Customer Notes

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Discrete 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).

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Continental Device India Limited
C-120 Naraina Industrial Area, New Delhi 110 028, India.
Telephone + 91-11-2579 6150, 5141 1112 Fax + 91-11-2579 5290, 5141 1119
email@cdil.com www.cdil.com