

SURFACE MOUNT SCHOTTKY BARRIER DIODES

SS0520 - SS0540

SOD-123
Formed SMD Package



Marking: As indicated below with cathode band

Marking

SS0520 - B2

SS0530 - B3

SS0540 - B4

Fast Switching Diodes

ABSOLUTE MAXIMUM RATINGS

Rating @ 25°C ambient temperature unless specified. For capacitive load, derate current by 20%

DESCRIPTION	SYMBOL	SS0520	SS0530	SS0540	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	V
RMS Voltage	V_{RMS}	14	21	28	V
DC Blocking Voltage	V_{DC}	20	30	40	V
Average Forward Current @ $T_a=75^\circ\text{C}$	I_{AV}	0.5			A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	5.5			A
Power Dissipation up to $T_a=25^\circ\text{C}$	$*P_D$	410			mW
Operating and Storage Junction Temperature Range	T_j, T_{stg}	- 55 to +125			$^\circ\text{C}$

*Vaild provided that terminals are kept @ ambient temperature

THERMAL RESISTANCE

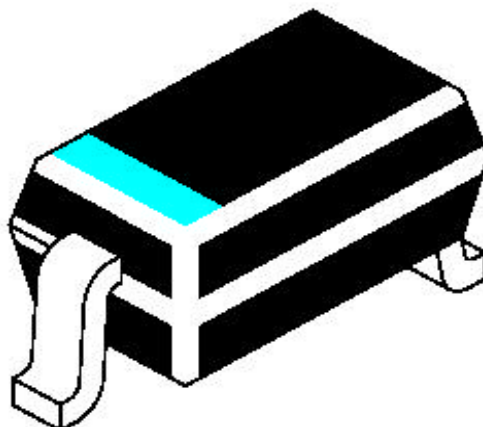
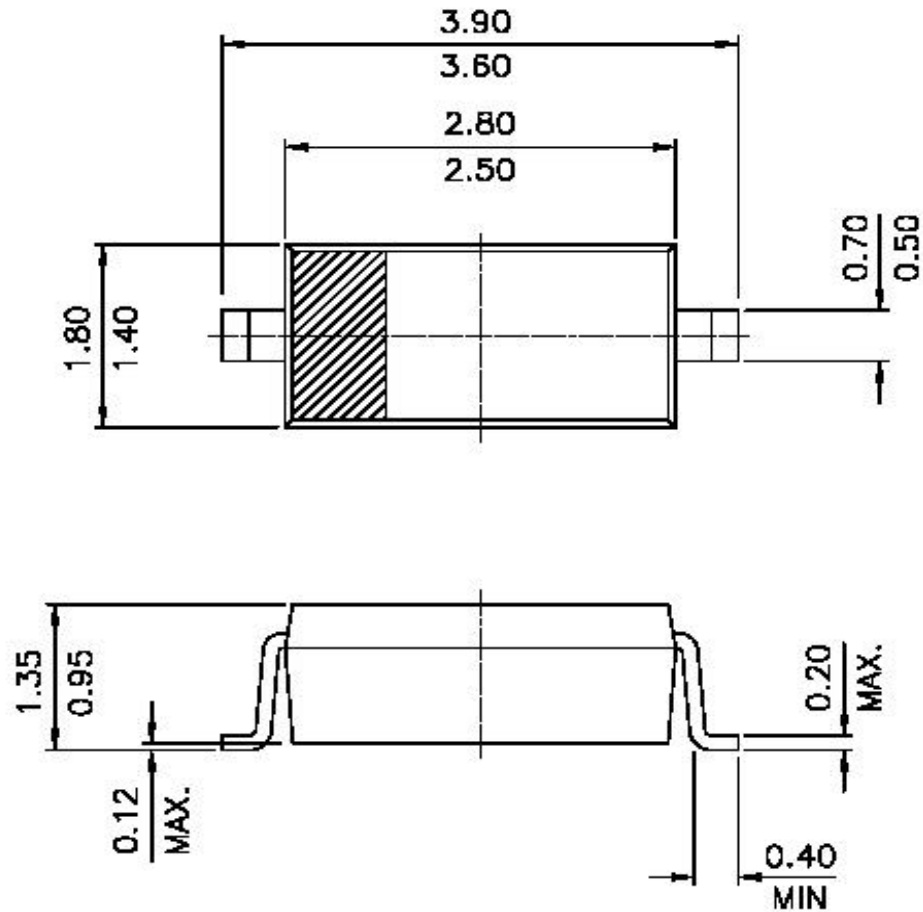
Junction to Lead	$R_{th(j-L)}$	150	$^\circ\text{C/W}$
Junction to Ambient in free air	$R_{th(j-a)}$	206	$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless specified otherwise)

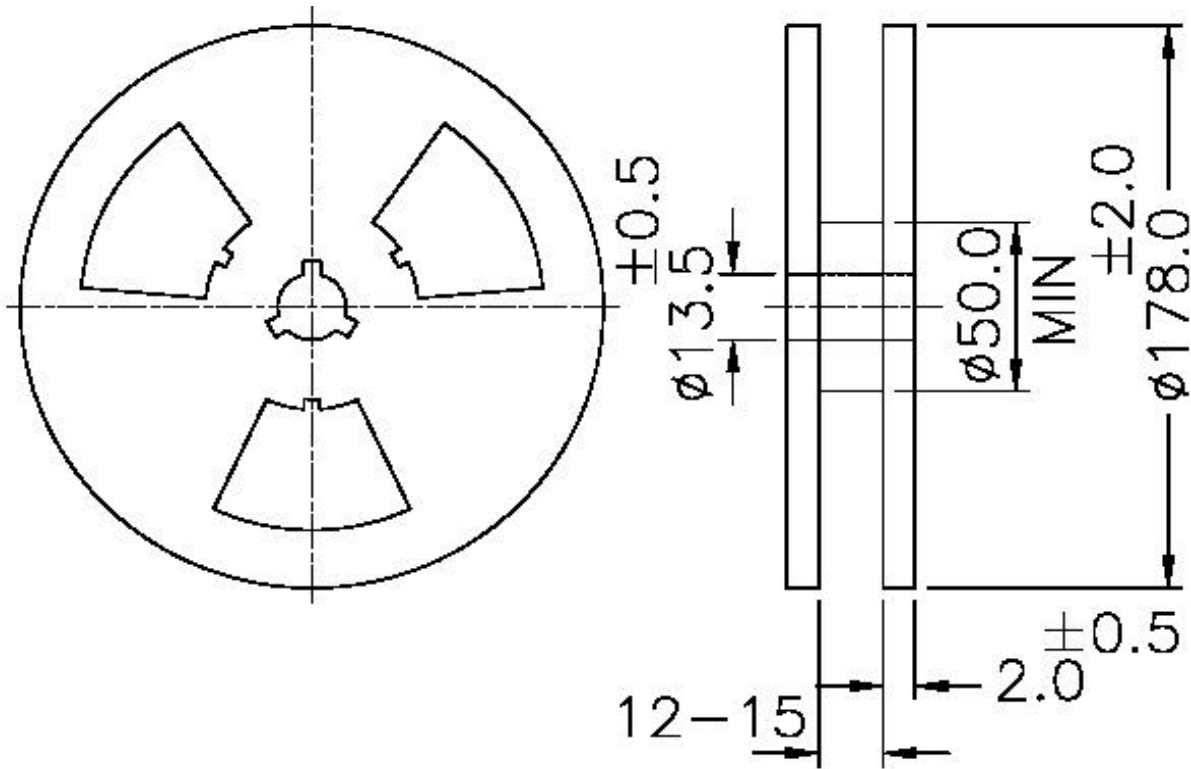
DESCRIPTION	SYMBOL	TEST CONDITION	SS0520	SS0530	SS0540	UNIT
Forward Voltage	V_F	$I_F = 0.1\text{A}$	< 0.3	< 0.375	-	V
		$I_F = 0.5\text{A}$	< 0.385	< 0.430	< 0.51	V
		$I_F = 1.0\text{A}$	-	-	< 0.62	V
Reverse Current	I_R	$V_R=10\text{V}$	< 75	< 20	-	μA
		$V_R=15\text{V}$			-	μA
		$V_R=20\text{V}$		-	< 10	μA
Junction Capacitance	C_J	$V_R=0\text{V}$	TYP170			pF

SS0520_0540Rev140105E

PACKAGE SOD 123



Cathode is marked by Band



ALL DIMENSIONS ARE IN mm
 REEL ϕ 178 mm (7")
 3000 Pcs / REEL

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 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.



CDIL is a registered Trademark of
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.cdilsemi.com