

## 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			°C

\*Vaild provided that terminals are kept @ ambient temperature

#### THERMAL RESISTANCE

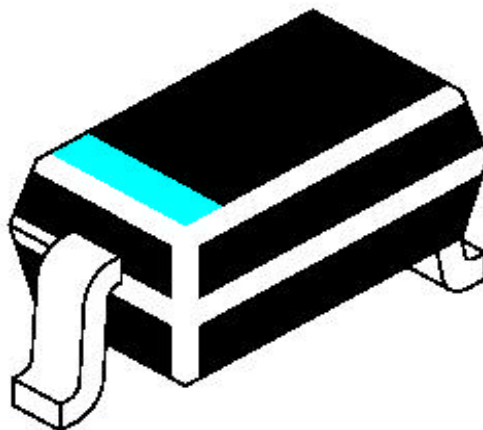
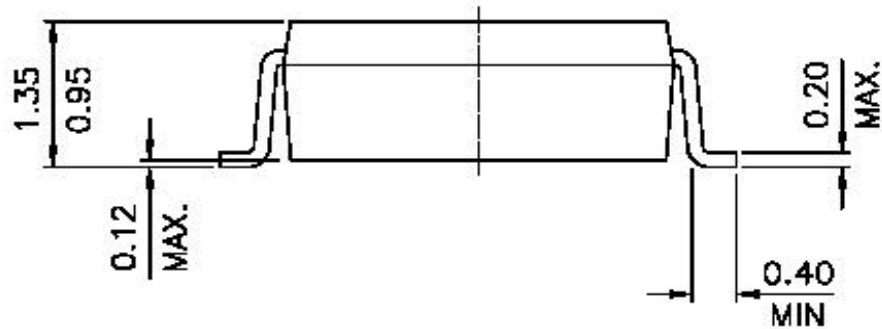
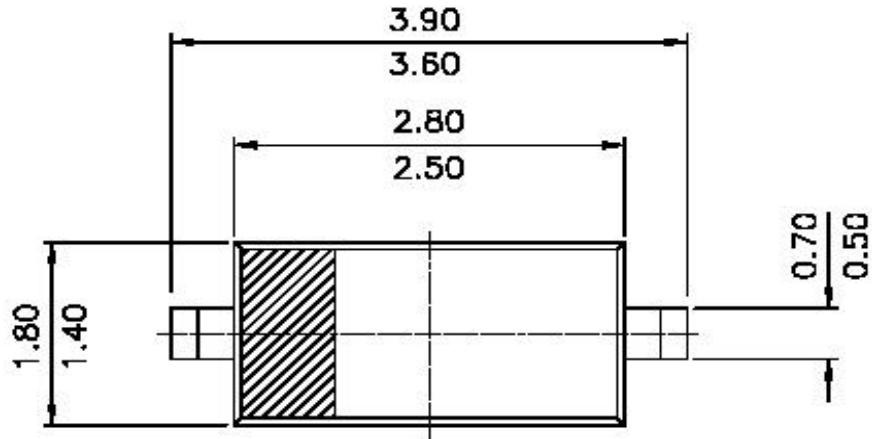
Junction to Lead	$R_{th(j-l)}$	150	°C/W
Junction to Ambient in free air	$R_{th(j-a)}$	206	°C/W

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

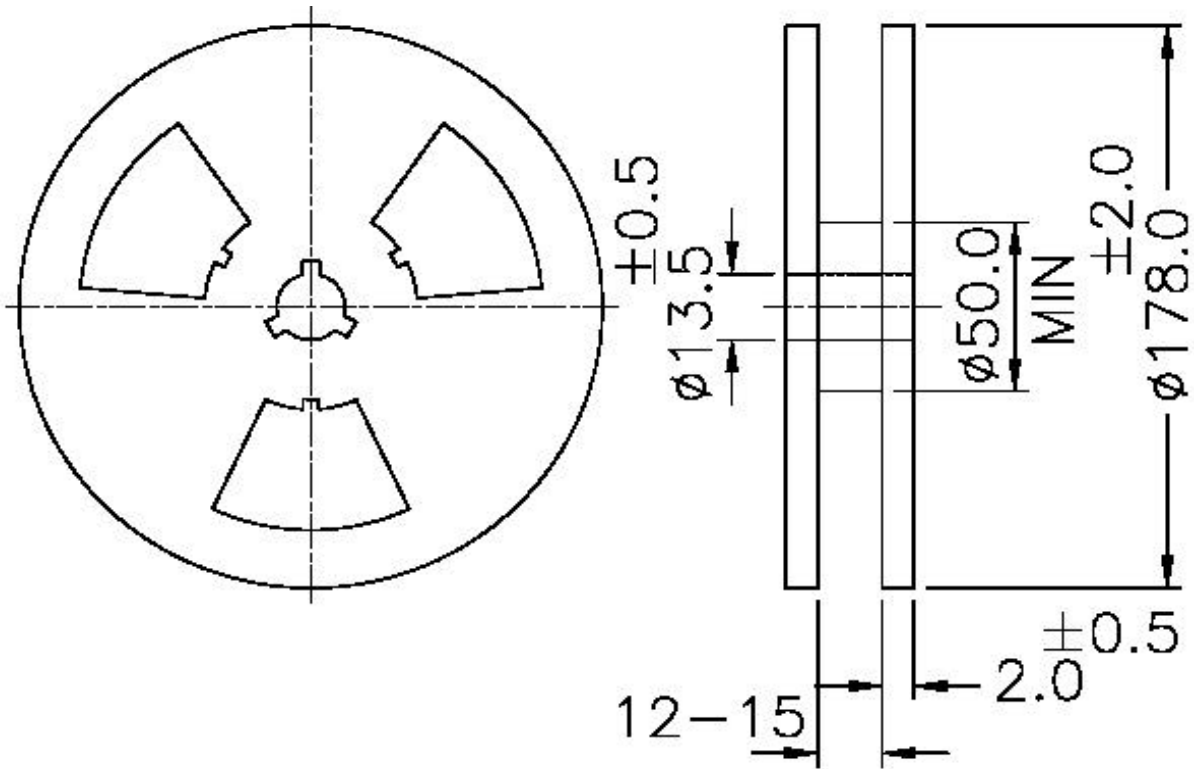
DESCRIPTION	SYMBOL	TEST CONDITION	SS0520	SS0530	SS0540	UNIT
Forward Voltage	$V_F$	$I_F = 0.1\text{A}$	< 0.3	< 0.375	-	V
		$I_F = 0.5\text{A}$	< 0.385	< 0.430	< 0.51	V
		$I_F = 1.0\text{A}$	-	-	< 0.62	V
Reverse Current	$I_R$	$V_R=10\text{V}$	< 75	-	-	μA
		$V_R=15\text{V}$	-	< 20	-	μA
		$V_R=20\text{V}$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

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