

## 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

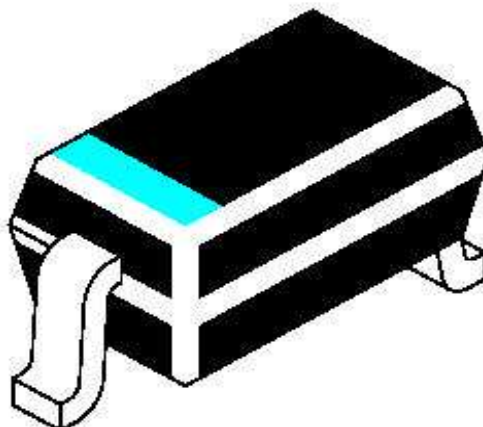
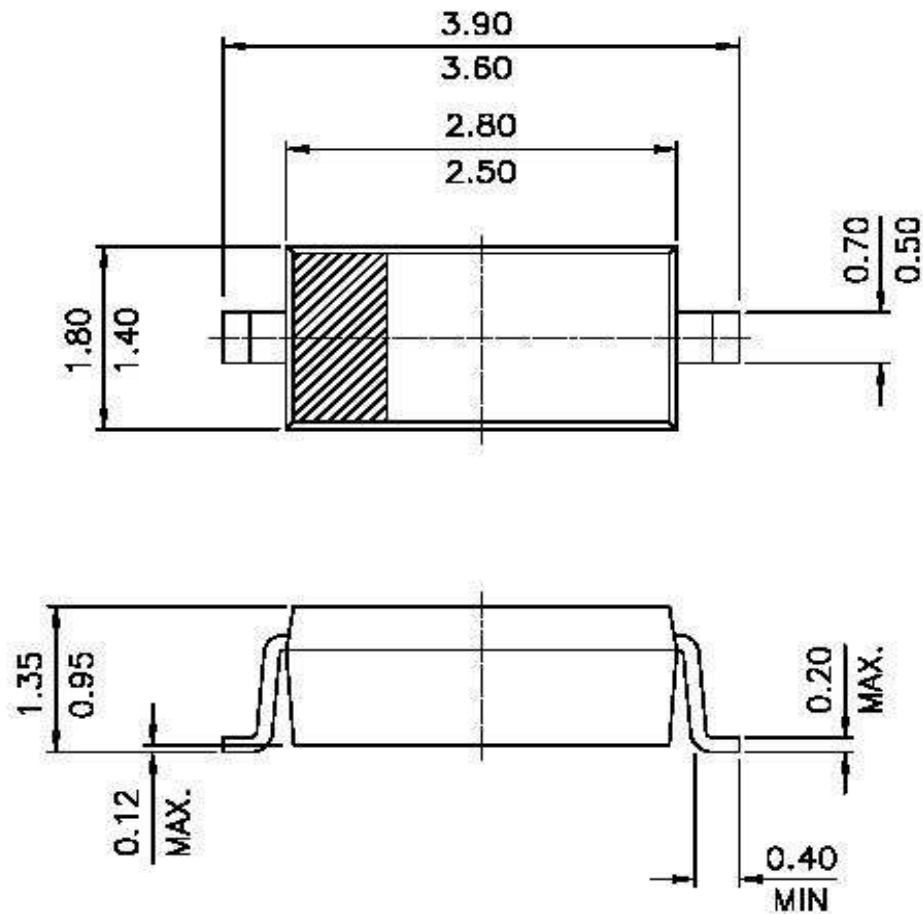
### THERMAL RESISTANCE

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

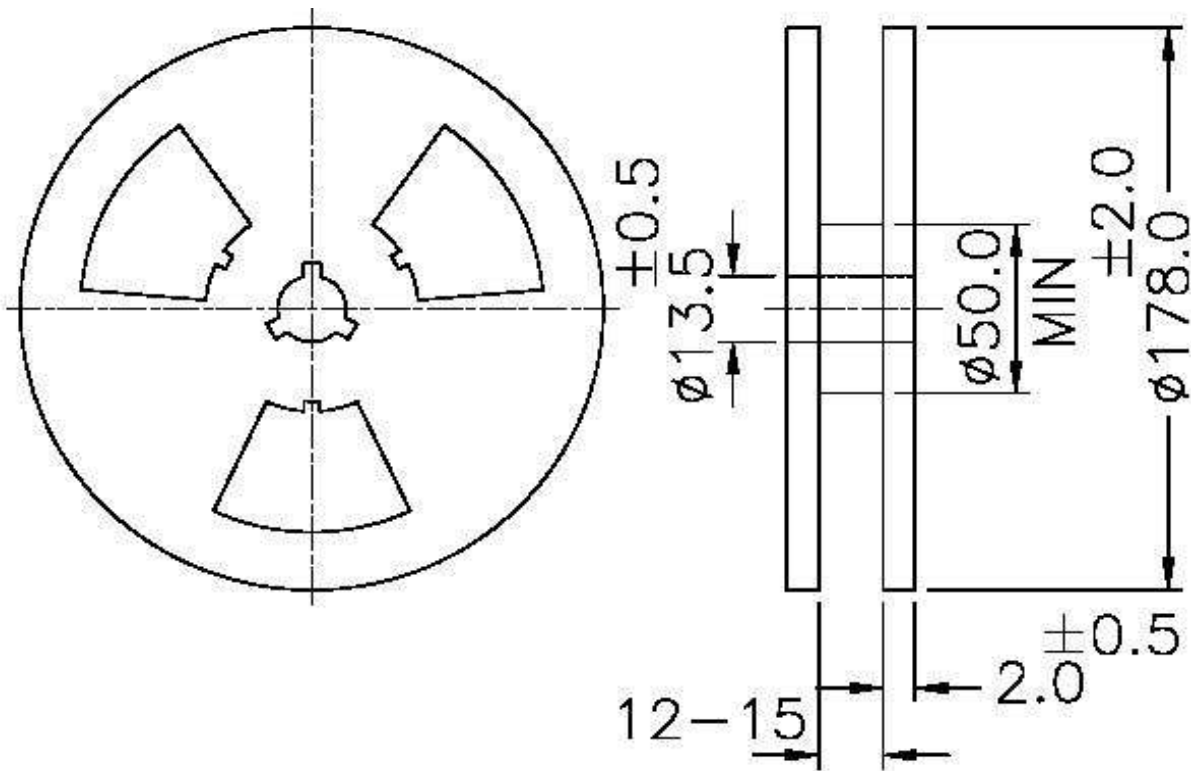
### ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ unless specified otherwise)

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	-	$\mu\text{A}$
		$V_R=15\text{V}$			-	$\mu\text{A}$
		$V_R=20\text{V}$		-	< 10	$\mu\text{A}$
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**

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