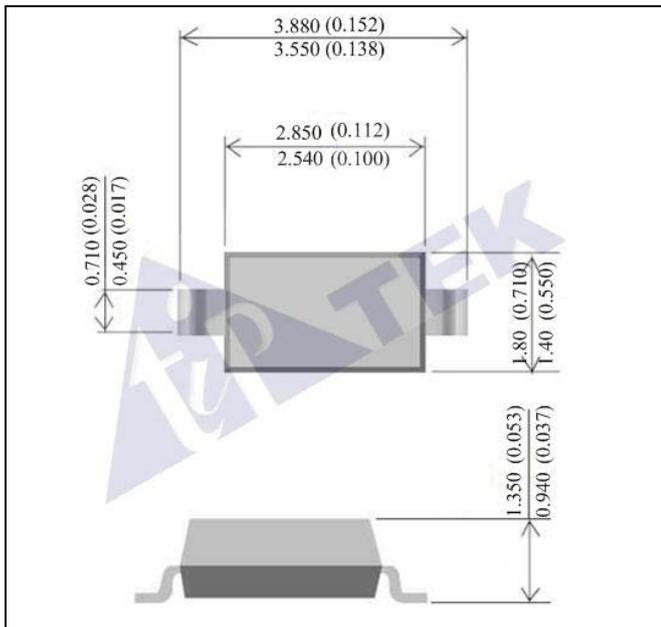


500mA SURFACE MOUNT SCHOTTKY BARRIER



CASE : SOD-123

DIMENSIONS IN MILLIMETERS AND (INCHES)

FEATURES

- LOW TURN-ON VOLTAGE
- FAST SWITCHING
- PN JUNCTION GUARD RING FOR TRANSIENT AND ESD PROTECTION
- BOTH NORMAL AND Pb FREE PRODUCT ARE AVAILABLE:
NORMAL:80~95%Sn,5~20%Pb
Pb FREE:98.5% Sn ABOVE

MECHANICAL DATA

- CASE : SOD-123,PLASTIC
- TERMINALS : SOLDERABLE PER MIL-STD-202, METHOD208
- POLARITY:SEE DIAGRAM BELOW
- APPROX. WEIGHT:0.008 GRAM
- Pb Free: SS0520~SS0540
Halogen Free: SS0520-H ~SS0540-H

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED.					
PARAMETER	SYMBOL	SS0520	SS0530	SS0540	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V_{RRM}	20@ $I_R=250\mu A$	30@ $I_R=130\mu A$	40@ $I_R=20\mu A$	V
MAXIMUM RMS VOLTAGE	V_{RMS}	14	21	28	V
MAXIMUM DC BLOCKING VOLTAGE	V_{DC}	20	30	40	V
MAXIMUM AVERAGE FORWARD CURRENT AT $T_a=75^\circ C$	I_{AV}	0.5			A
PEAK FORWARD SURGE CURRENT,8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD (JEDEC METHOD)	I_{FSM}	5.5			A
MAXIMUM THERMAL RESISTANCE	$R_{\theta ja}$	244			$^\circ C/W$
JUNCTION TEMPERATURE	T_J	-55 TO +125			$^\circ C$
STORAGE TEMPERATURE	T_{STG}	- 55 TO +150			$^\circ C$
ELECTRICAL CHARACTERISTICS (AT $T_a = 25^\circ C$ UNLESS OTHERWISE NOTED)					
PARAMETER	SYMBOL	SS0520	SS0530	SS0540	UNITS
MAXIMUM INSTANTANEOUS FORWARD VOLTAGE	V_F	0.3@0.1A 0.385@0.5A	0.375@0.1A 0.430@0.5A	0.51@0.5A 0.62@1.0A	V
MAXIMUM REVERSE CURRENT	I_R	75@ $V_R=10V$ 250@ $V_R=20V$	20@ $V_R=15V$ 130@ $V_R=30V$	10@ $V_R=20V$ 20@ $V_R=40V$	μA
TYPICAL JUNCTION CAPACITANCE:AT $V_R=1V, f=1.0MHz$	C_J	170			pF

NOTE: 1.FR-5 BOARD =1.0x0.75x0.062 IN

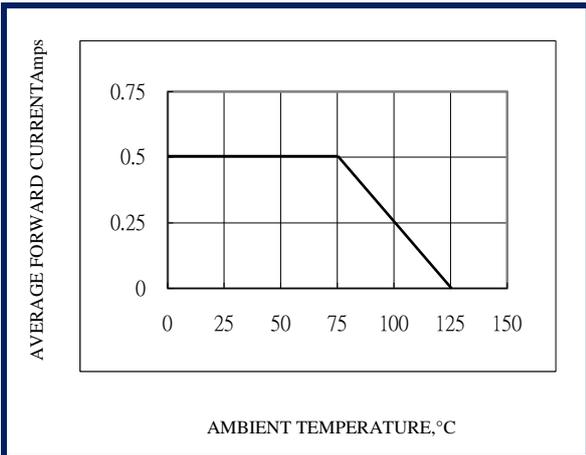


Fig.1-FORWARD CURRENT DERATING

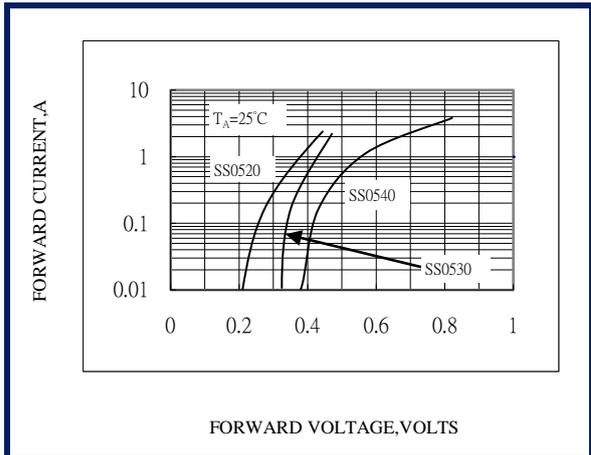


Fig.2-TYPICAL FORWARD VOLTAGE

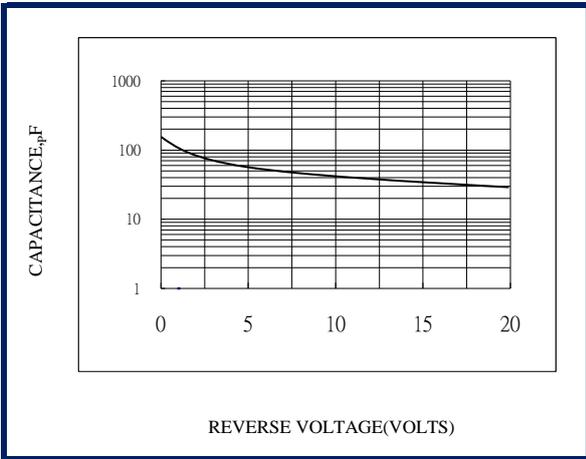


Fig.3- TYPICAL JUNCTION CAPACITANCE