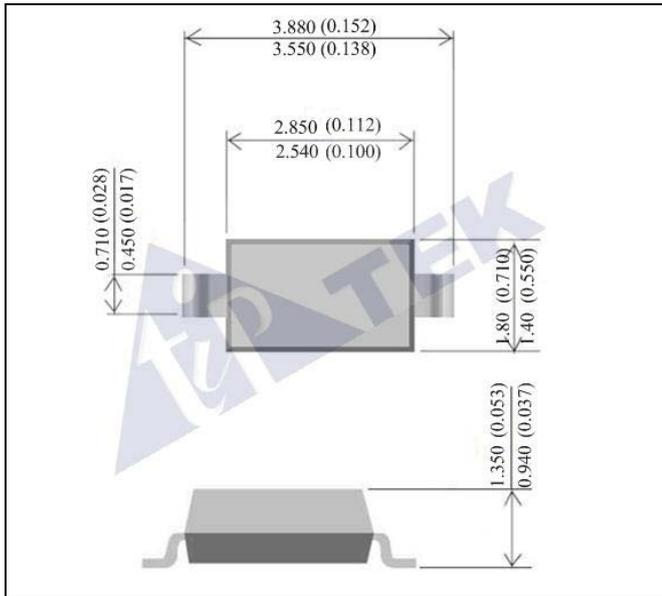


1.0A SURFACE MOUNT SCHOTTKY BARRIER



CASE : SOD-123

DIMENSIONS IN MILLIMETERS AND (INCHES)

FEATURES

- FAST SWITCHING SPEED
- HIGH CONDUCTOR
- SURFACE MOUNT PACKAGE IDEALLY SUITED FOR AUTOMATIC INSERTION
- ELECTRICAL IDENTICAL STANDARD JEDEC
- 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
- APPROX. WEIGHT:0.008 GRAM
- Pb Free : SS1020~SS1040
- Halogen Free : SS1020-H~SS1040-H

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED.					
PARAMETER	SYMBOL	SS1020	SS1030	SS1040	UNITS
DC BLOCKING VOLTAGE	V_R	20	30	40	V
RMS REVERSE VOLTAGE	V_{RMS}	14	21	28	V
PEAK REPETITIVE PEAK REVERSE VOLTAGE	V_{RRM}	20	30	40	V
Non-REPETITIVE REVERSE VOLTAGE	V_{RM}	20	30	40	V
RECTIFIED CURRENT(AVERAGE),HALF WAVE RECTIFICATION WITH RESISTIVE LOAD AND $f \geq 60\text{Hz}$	I_0	1.0			A
NON-REPETITIVE PEAK FORWARD CURRENT @8.3ms	I_{FSM}	8			A
REPETITIVE PEAK FORWARD CURRENT	I_{FRM}	625			mA
THERMAL RESISTANCE JUNCTION TO AMBIENT	$R_{\theta JA}$	500			K/W
STORAGE TEMPERATURE	T_{STG}	-65 TO +150			°C
ELECTRICAL CHARACTERISTICS (AT $T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)					
PARAMETER	SYMBOL	SS1020	SS1030	SS1040	UNITS
REVERSE BREAKDOWN VOLTAGE($I_R=1\text{mA}$)	$V_{(BR)}$	20	30	40	V
MAXIMUM FORWARD VOLTAGE	V_F	1A	0.45	0.55	V
		3A	0.75	0.875	
MAXIMUM DC REVERSE CURRENT AT V_R	I_R	1			mA
DIODE CAPACITANCE $V_R=4\text{V}, f=1\text{MHZ}$	C_D	120			pF

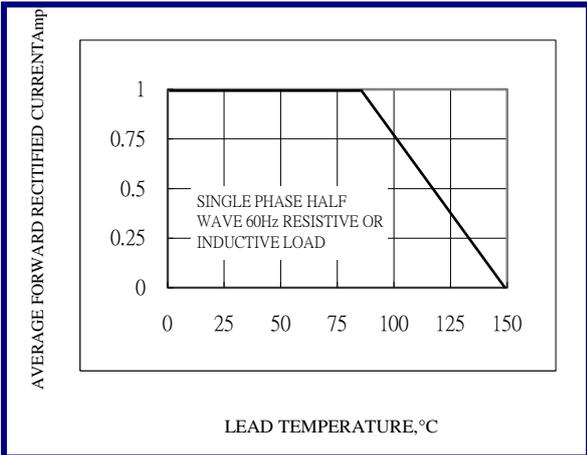


Fig.1-FORWARD CURRENT DERATING CURVE

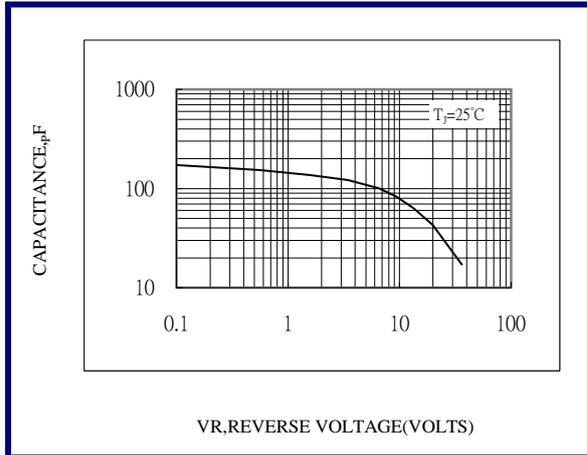


Fig.2-TYPICAL JUNCTION CHARACTERISTIC

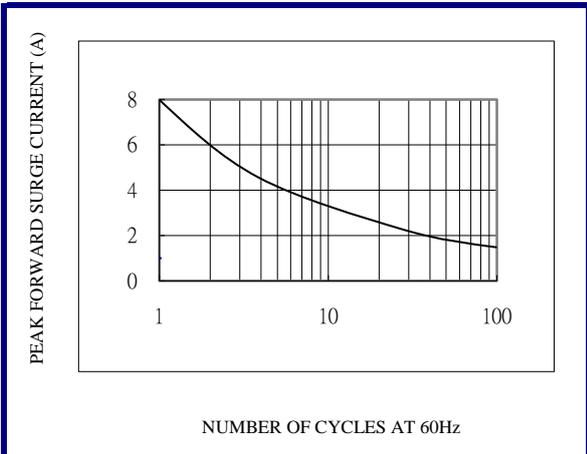


Fig.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

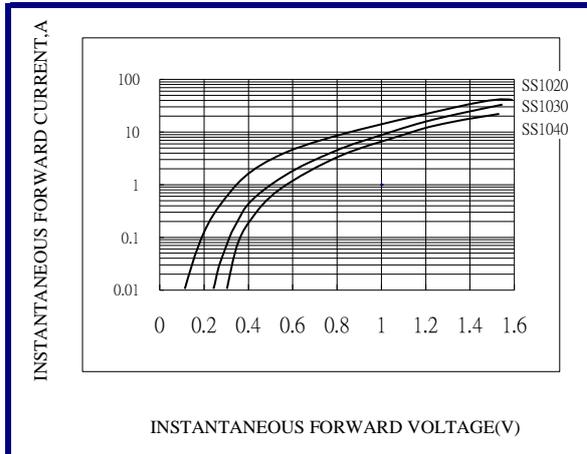


Fig.4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

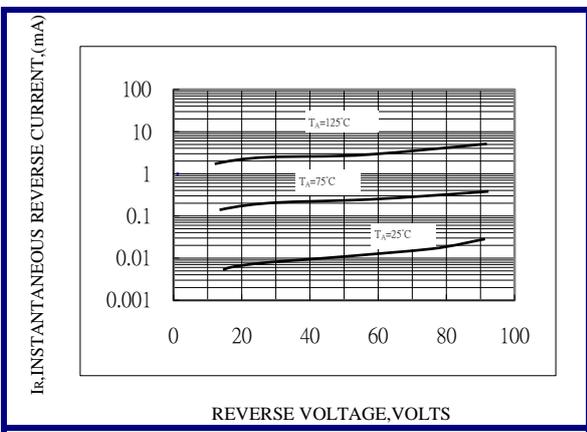


Fig.5-TYPICAL REVERSE CHARACTERISTICS

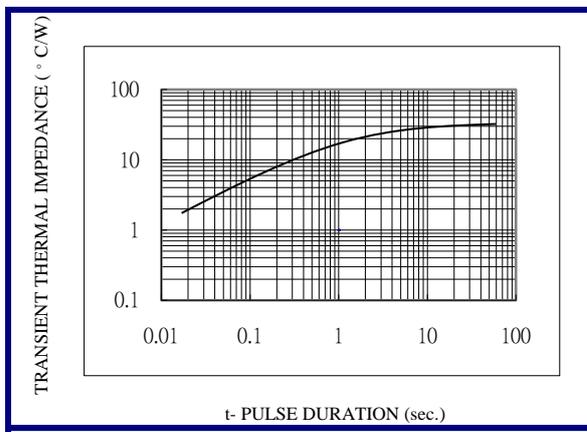


Fig.6-TYPICAL TRANSIENT THERMAL IMPEDANCE