



# SS1040

## SURFACE MOUNT SCHOTTKY BARRIER

**VOLTAGE** 40 Volts **CURRENT** 1.0 Ampers

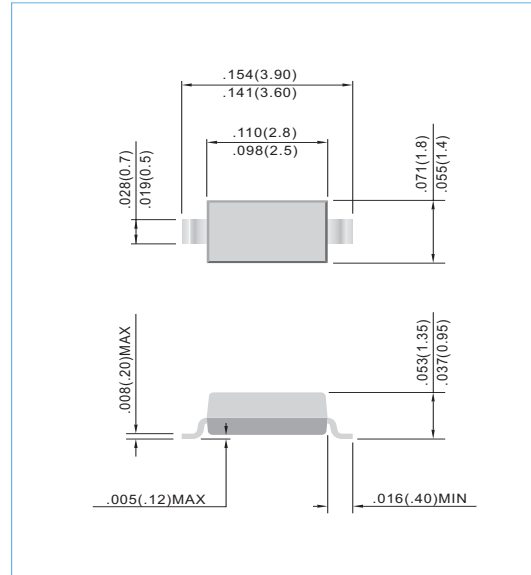
SOD-123 Unit: inch (mm)

### FEATURES

- Fast switching speed
- Surface mount package ideally suited for automatic insertion
- Electrical identical standard JEDEC.
- High conductor
- In compliance with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

- Case: SOD-123, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.008 gram
- Marking : G5
- Polarity : Color band denotes cathode end



### ABSOLUTE RATINGS

PARAMETER	Symbol	Value	Units
Reverse Voltage	$V_R$	40	V
Peak Reverse Voltage	$V_{RRM}$	40	V
Average Rectified Current at Temp=75°C	$I_{F(AV)}$	1.0	A
Non-repetitive Peak Forward Surge Current at t=8.3ms	$I_{FSM}$	30	A

### THERMAL CHARACTERISTICS

PARAMETER	Symbol	Value	Units
Thermal Resistance , Junction to Ambient	$R_{\theta JA}$	325	°C/W
Junction Temperature	$T_J$	125	°C
Storage Temperature at Temp=25°C	$T_{STG}$	-55 to 150	°C

Note.1 Mounted with minimum recommended pad size, PC Board FR4.



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## ELECTRICAL CHARACTERISTICS

PARAMETER	Symbol	Test Condition	MIN.	TYP.	MAX.	Units
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R=500 \mu A$	40	--	--	V
Reverse Current	$I_R$	$V_R=40 V$	--	--	500	$\mu A$
Forward Voltage	$V_F$	$I_F=1.0 A$	--	--	0.55	V
Diode Capacitance	$C_J$	$V_R=0V, f=1.0MHz$	--	--	230	pF

### RATING AND CHARACTERISTIC CURVES

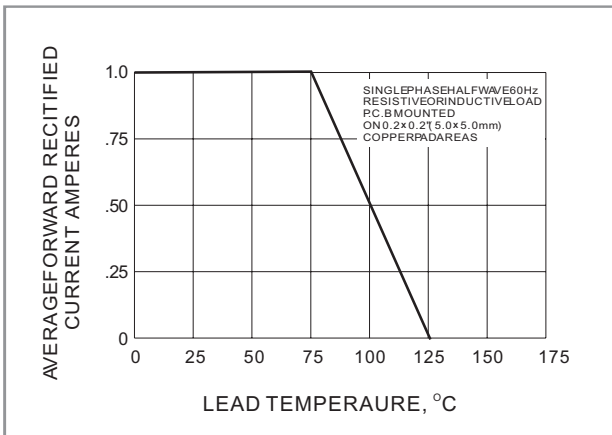


Fig.1- FORWARD CURRENT DERATING CURVE

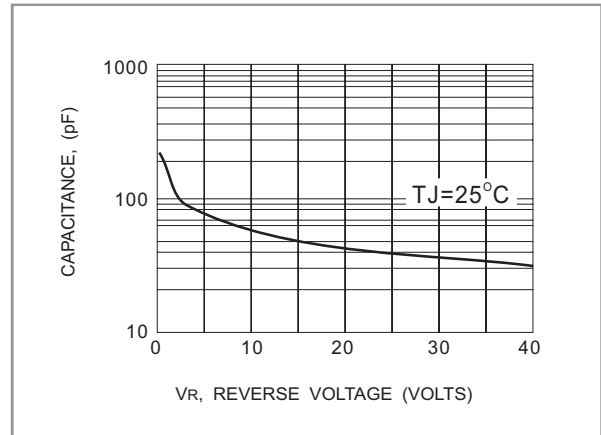


Fig.2- TYPICAL JUNCTION CHARACTERISTIC

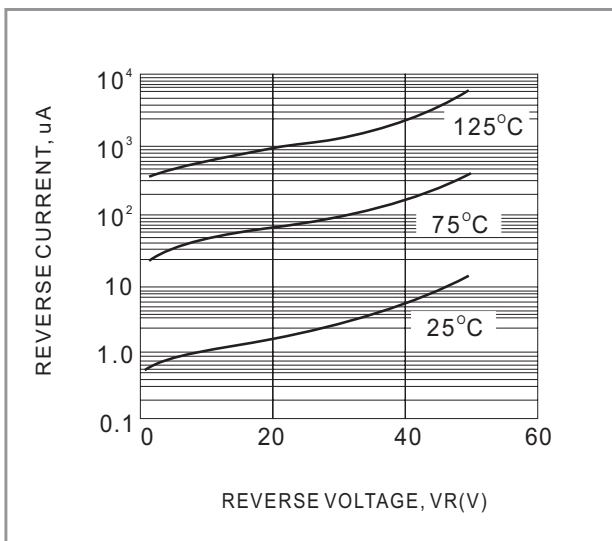


Fig.3- TYPICAL REVERSE CHARACTERISTIC

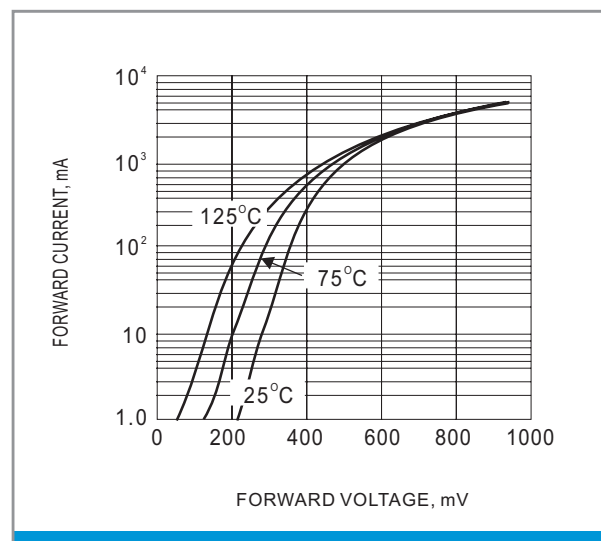


Fig.4- TYPICAL FORWARD CHARACTERISTIC