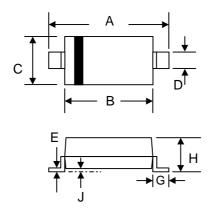




# SURFACE MOUNT SCHOTTKY BARRIER DIODE

#### **Features**

- Low Turn-on Voltage
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection
- Designed for Surface Mount Application
- Plastic Material UL Recognition Flammability Classification 94V-O



SOD-123				
Dim	Min	Max		
Α	3.6	3.9		
В	2.5	2.8		
C	1.4	1.8		
D	0.5	0.7		
E	_	0.2		
G	0.4			
Н	0.95	1.35		
J		0.12		
All Dimensions in mm				

### **Mechanical Data**

Case: SOD-123, Molded Plastic

Terminals: Plated Leads Solderable per

MIL-STD-202, Method 208

Polarity: Cathode Band

• Weight: 0.01 grams (approx.)

Marking: G5

Lead Free: For RoHS / Lead Free Version,
 Add "-LF" Suffix to Part Number, See Page 4

## Maximum Ratings @T<sub>A</sub>=25°C unless otherwise specified

Characteristic	Symbol	SS1040	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	40	V
Forward Continuous Current (Note 1)	lF	1.0	Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	lгsм	25	А
Power Dissipation (Note 1)	Pd	450	mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{ heta}$ JA	222	°C/W
Operating and Storage Temperature Range	Тj, Тsтg	-65 to +125	°C

## Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

Characteristic		Symbol	SS1040	Unit
Forward Voltage Drop	@IF = 1.0A	VFM	0.55	V
Peak Reverse Leakage Current @ DC Blocking Voltage		lгм	500	μA
Typical Junction Capacitance (VR = 4V DC, f = 1MHz)		Cj	50	pF

Note: 1. Valid provided that terminals are kept at ambient temperature.

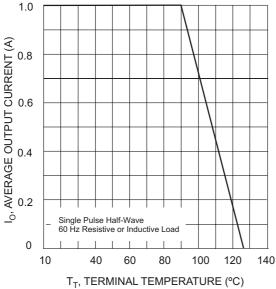
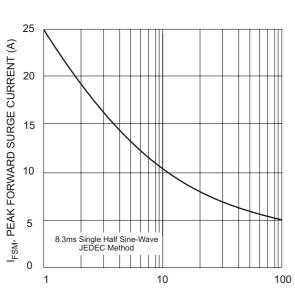
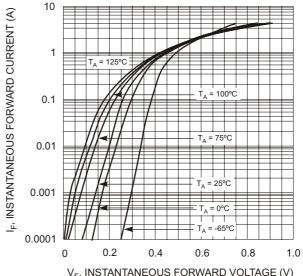


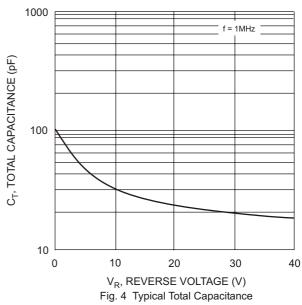
Fig. 1 Forward Current Derating Curve



NUMBER OF CYCLES AT 60 Hz Fig. 3 Maximum Non-Repetitive Peak Fwd Surge Current



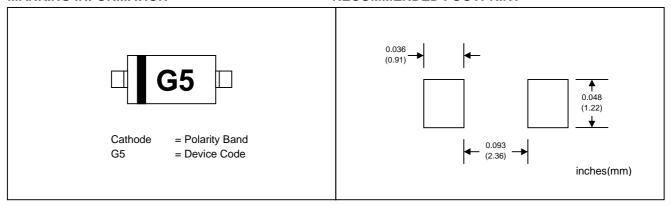
 ${
m V_F}, {
m INSTANTANEOUS} {
m Forward} {
m Voltage} {
m (V)}$  Fig. 2 Typical Forward Characteristics



SS1040 2 of 4 Fax: 02-25215390 極利企業有限公司 Tel: 02-25651052

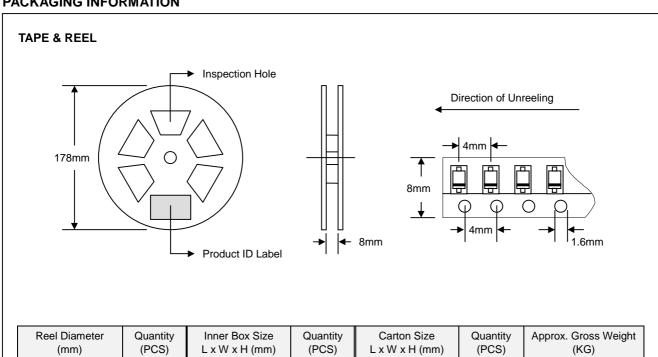
### **MARKING INFORMATION**

### RECOMMENDED FOOTPRINT



### **PACKAGING INFORMATION**

SS1040



Reel Diameter (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
178	3,000	187 x 187 x 65	15,000	390 x 240 x 420	150,000	10.0

Note: 1. Anti-static plastic reel, white, water clear or blue color. Inspection hole might be varied in different alignment.

2. Components are packed in accordance with EIA standard 481-1 and 481-2.

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#### **ORDERING INFORMATION**

Product No.	Package Type	Shipping Quantity		
SS1040-T1	SOD-123	3000/Tape & Reel		

- 1. Shipping quantity given is for minimum packing quantity only. For minimum
- order quantity, please consult the Sales Department.

  To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, SS1040-T1-LF. 2.

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**WARNING**: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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