



**Surface Mount Schottky Barrier Diode****Forward Current - 1 A
Reverse Voltage - 40V****Description**

- Low Power Loss, High Efficiency
- Low Forward Voltage Schottky Rectifier
- High Current Capability
- High Surge Capability

Mechanical Data

- Case: SOD123 Package
- Case Material: "Green" Molding Compound UL Flammability Classification Rating 94V-0
- Terminals: Matte tin plated, solderable per MIL-STD-750, method 2026
- Component in accordance to RoHS
- Halogen Free

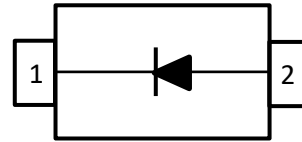
Note: Products with logo  or  are made by HY Electronic (Cayman) Limited.

Ordering Information

- Package :SOD123
- Reel Size :7 (inches)
- Quantity Per Reel :3,000/Tape & Reel
- Quantity One Box :45,000/Tape & Reel

Package Outline

SOD123 Top View

Device Schematic & PIN Configuration**Product Type Marking Code****Maximum Ratings (@TA = +25°C, unless otherwise specified.)****Absolute Ratings**

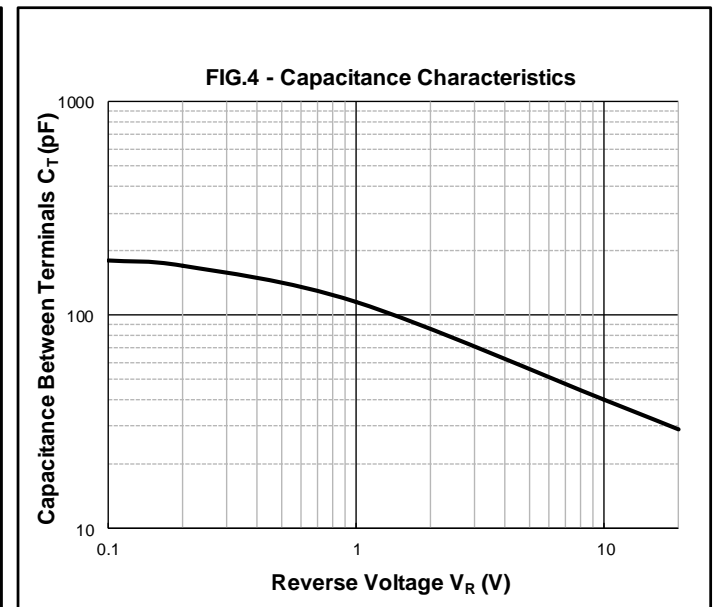
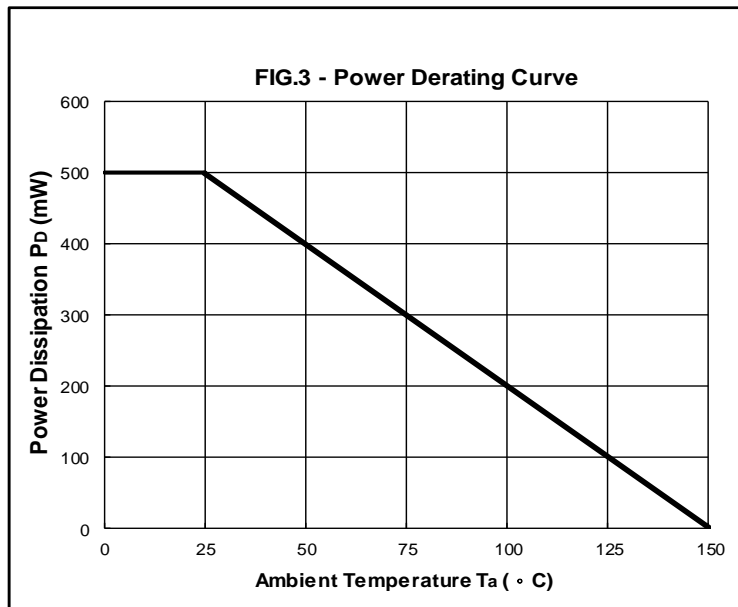
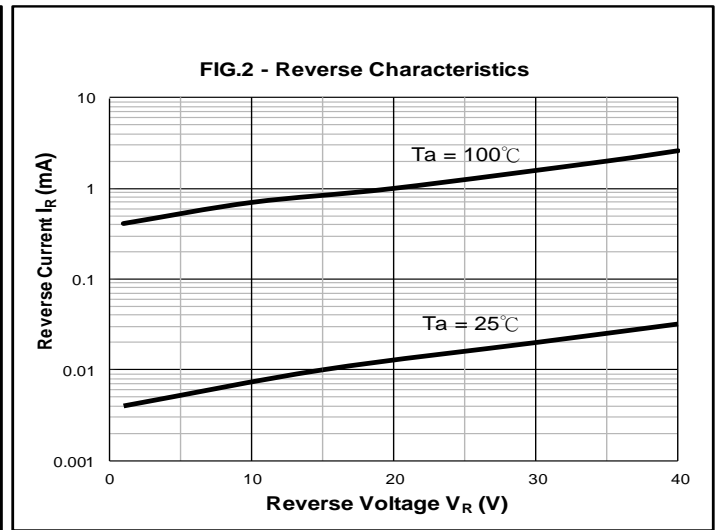
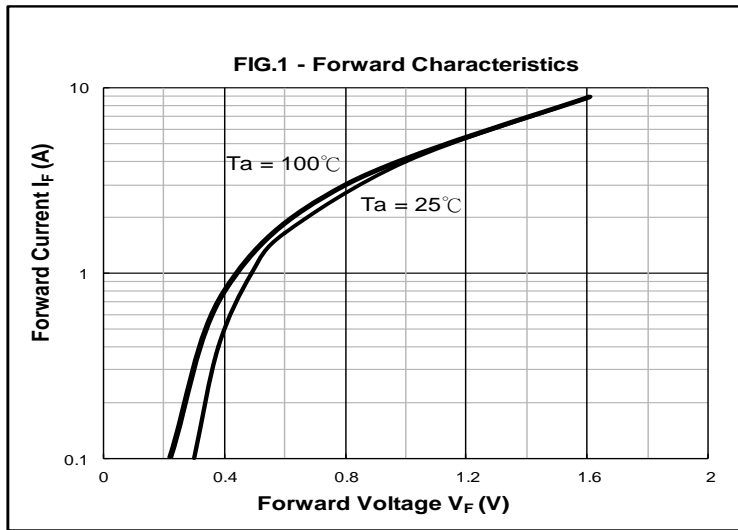
Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	40	V
RMS Voltage	V_{RMS}	28	V
DC Blocking Voltage	V_{DC}	40	V
Forward Rectified Current	I_{FM}	1	A
Peak Forward Surge Current @ t = 8.3ms	I_{FSM}	9	A
Power Dissipation	P_D	500	mW
Storage Temperature Range	T_{STG}	-50 to +150	°C
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	250	°C/W

Electrical Characteristics

Parameter	Test Conditions	Symbol	Max	Unit
Reverse Voltage	$I_R = 1mA$	V_{BR}	40	V
Reverse Current	$V_R = 40V$	I_R	1	mA
Forward Voltage	$I_F = 1A$	V_F	0.60	V
	$I_F = 3A$		0.90	
Junction Capacitance	$V_R = 4V, F = 1MHz$	C_D	120	pF

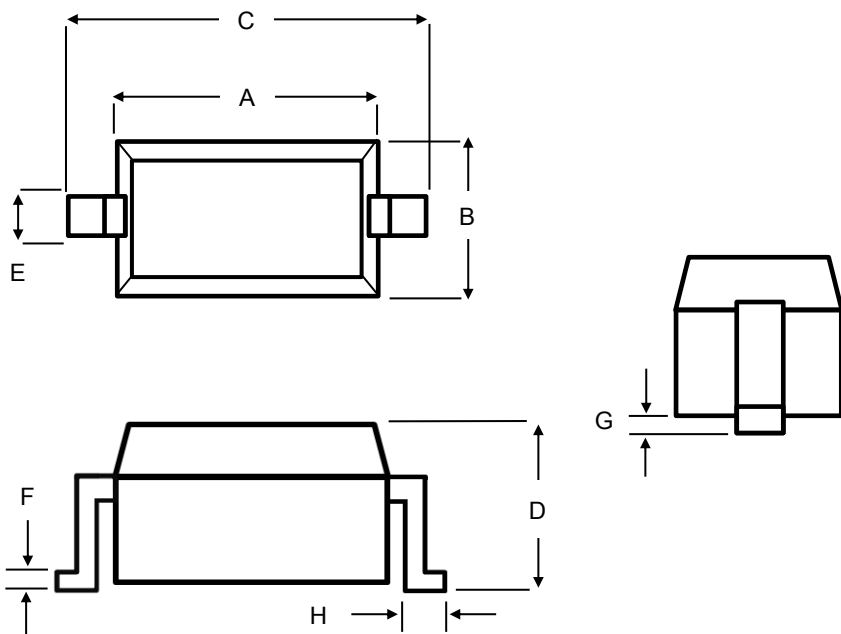


Rating and Characteristic Curves



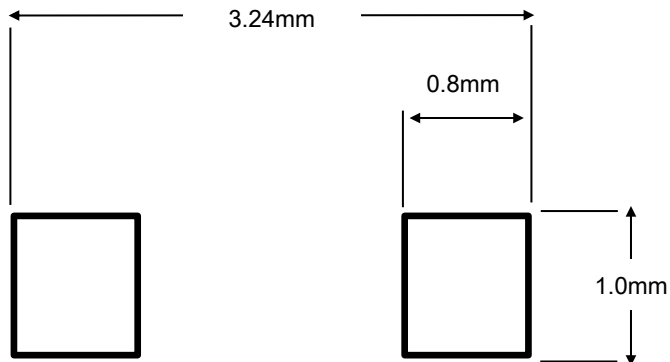


Package Outline Dimensions



SOD123 Package		
Dim	Min	Max
A	2.60	2.80
B	1.50	1.70
C	3.55	3.85
D	1.05	1.25
E	0.45	0.65
F	0.08	0.15
G	-	0.10
H	0.25	0.45
All Dimensions in mm		

Suggested Soldering Pad Layout



Note:

- 1. The pad layout is for reference purposes only.
- 2. General tolerance $\pm 0.05\text{mm}$



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