

SuperDiode – 250mW Plastic-Encapsulate Schottky Barrier Diode

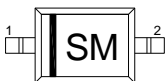
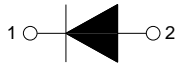
1. Features

- High current capability
- Low forward voltage drop
- Power dissipation of 250mW

2. Mechanical Data

- SOD-323 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any

3. Marking and Circuit

Marking	Circuit
	

4. Specification

Absolute Maximum Rating & Thermal Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

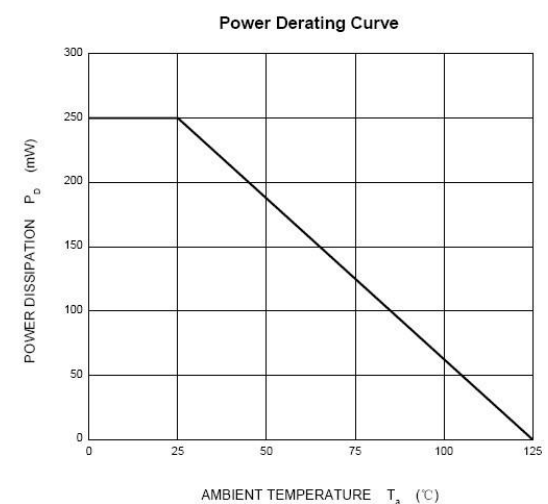
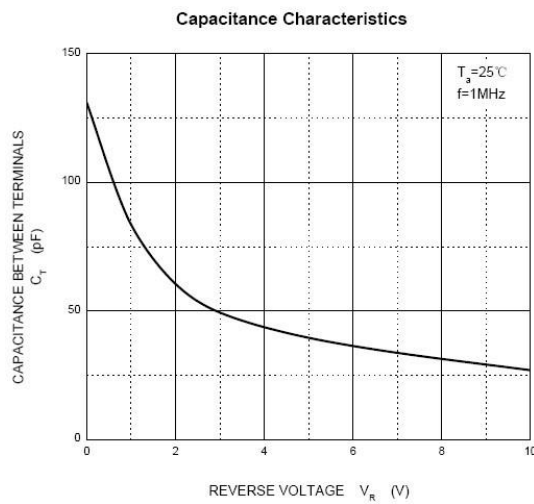
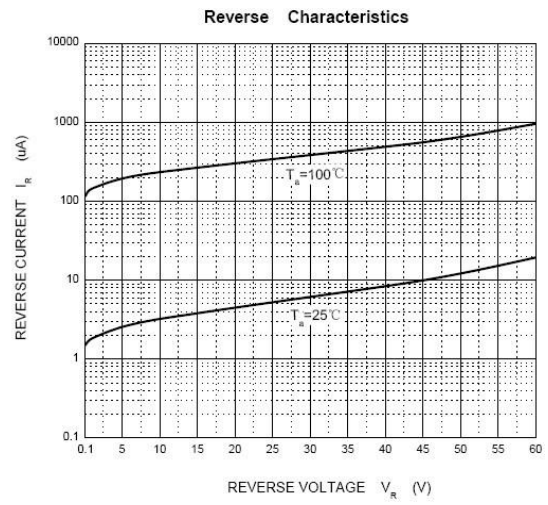
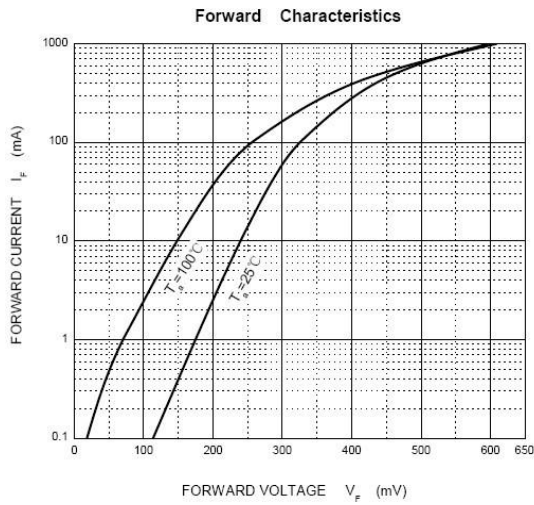
Parameters	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	60	V
Maximum RMS voltage	V_{RMS}	42	V
Maximum DC blocking voltage	V_{DC}	60	V
Maximum average forward rectified current	I_{FM}	1	A
Peak forward surge current 8.3ms single half sine-wave	I_{FSM}	10	A
Typical thermal resistance	$R_{\theta JA}$	400	°C/W
Power Dissipation	P_D	250	mW
Junction temperature	T_J	125	°C
Storage temperature range	T_S	-55~150	°C

Valid provided that electrodes are kept at ambient temperature

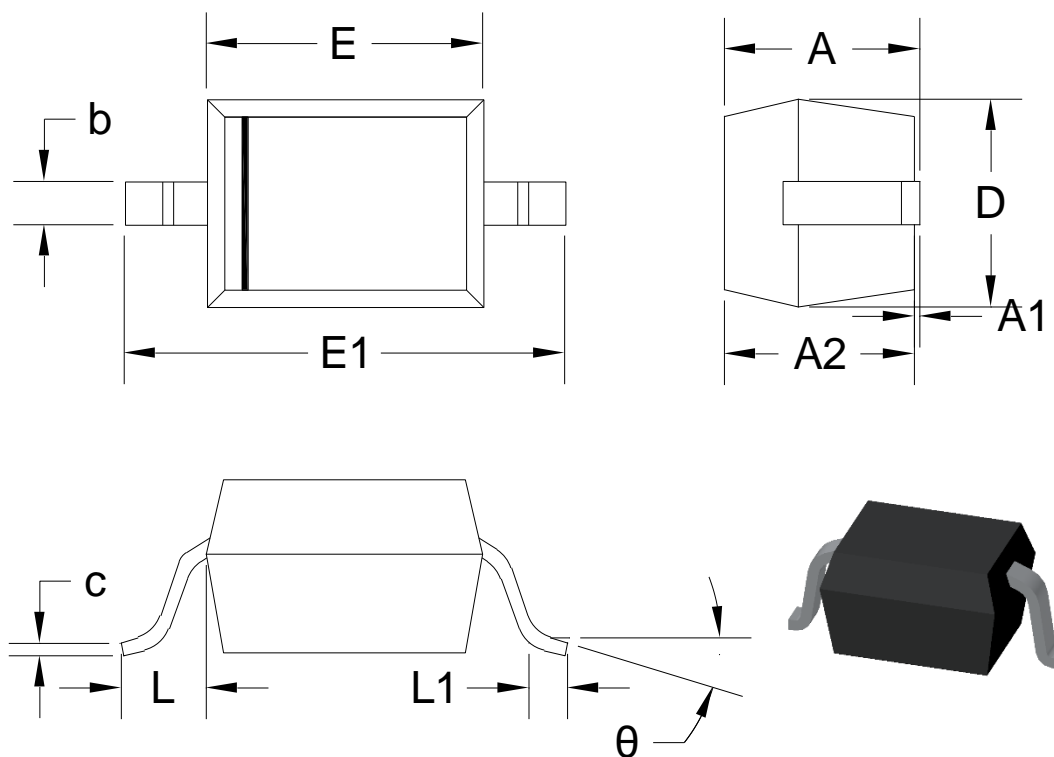
Electrical Characteristics (At $T_A = 25^\circ C$ unless otherwise specified)

Symbols	Parameter	Test Condition	Limits			Unit
			Min.	Typ.	Max.	
I_R	Reverse Leakage Current	$V_R=60V$			100	uA
V_F	Forward Voltage	$I_F=1.0A$			0.7	V

5. Typical Characteristic

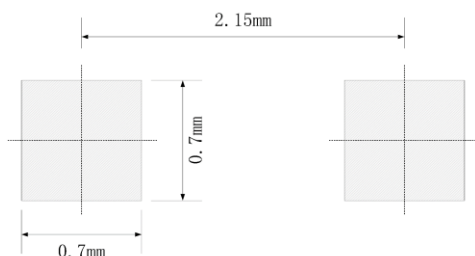


6. Dimension and Patterns (SOD-323)



Units: mm

Symbol	Min.	Max.	Symbol	Min.	Max.
A		1.000	E	1.600	1.800
A1	0.000	0.100	E1	2.550	2.750
A2	0.800	0.900	L	0.475REF	
b	0.250	0.350	L1	0.250	0.400
c	0.080	0.150	θ	0°	8°
D	1.200	1.400			



Note:

1. Controlling dimension: in millimeters
2. General tolerance: $\pm 0.05\text{mm}$
3. The pad layout is for reference only
4. Unit: mm

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