

## Plastic-Encapsulate Diodes

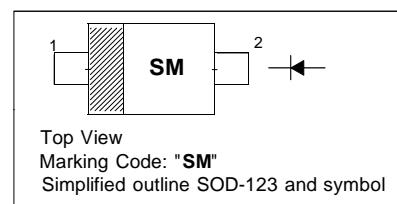
Schottky Barrier Diode

### FEATURES

- Guard ring protection
- Low forward voltage drop
- For use in low voltage, high frequency inverters
- High surge current capability

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



**Marking: SM**

### MAXIMUM RATINGS( Ta=25°C unless otherwise noted )

Symbol	Parameter	Value	Unit
<b>V<sub>RRM</sub></b>	Maximum recurrent peak reverse voltage	60	V
<b>V<sub>RMS</sub></b>	Maximum RMS voltage	42	
<b>V<sub>DC</sub></b>	Maximum DC blocking voltage	60	
<b>I<sub>F</sub></b>	Continuous forward current	1	A
<b>I<sub>FSM</sub></b>	Non-repetitive Peak forward surge current@t=8.3ms	10	
<b>P<sub>tot</sub></b>	Total power dissipation	250	mW
<b>R<sub>θJA</sub></b>	Thermal resistance junction to ambient air	400	°C/W
<b>T<sub>J</sub></b>	Junction temperature	125	°C
<b>T<sub>stg</sub></b>	storage temperature	-55~+150	°C

### ELECTRICAL CHARACTERISTICS(Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
<b>Maximum instantaneous forward voltage</b>	V <sub>F</sub>	I <sub>F</sub> =1A			0.7	V
<b>Maximum DC reverse current at rated DC blocking voltage</b>	I <sub>R</sub>	V <sub>R</sub> =60V			0.1	mA
<b>Total capacitance</b>	C <sub>tot</sub>	V <sub>R</sub> =4V,f=1MHz			120	pF



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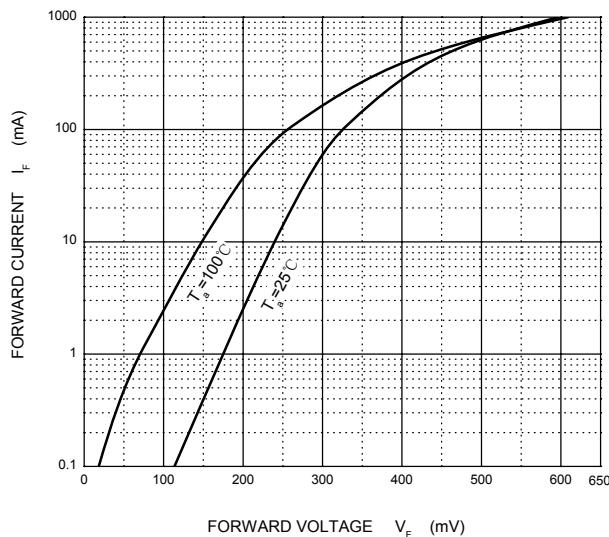
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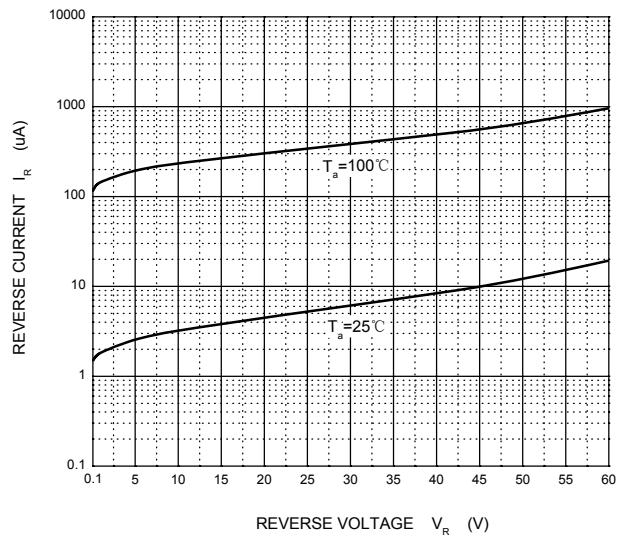
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## Typical Characteristics

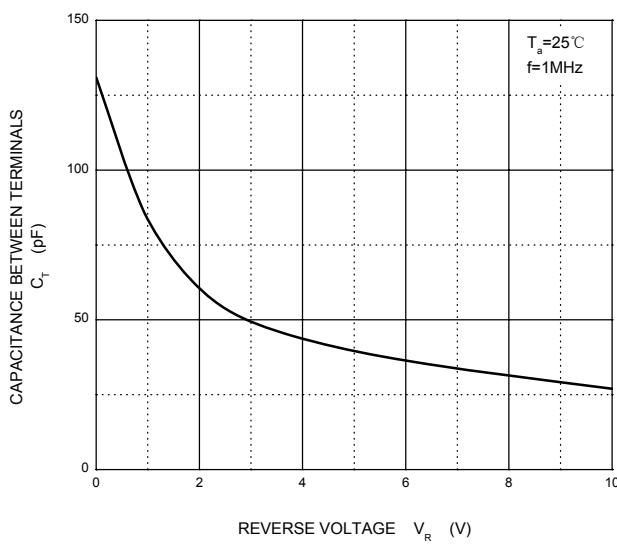
Forward Characteristics



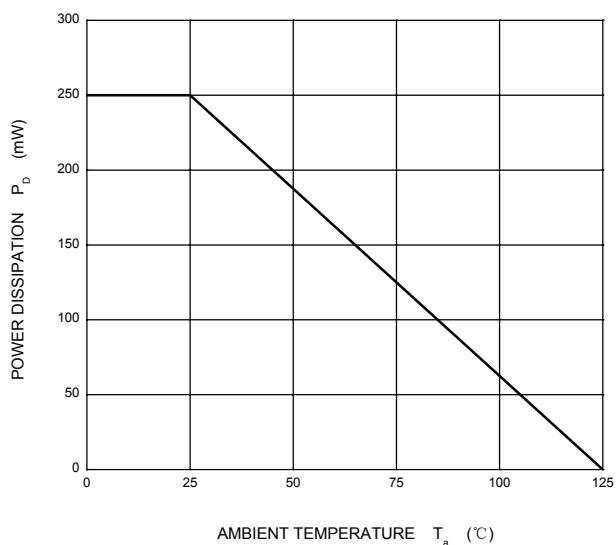
Reverse Characteristics



Capacitance Characteristics



Power Derating Curve





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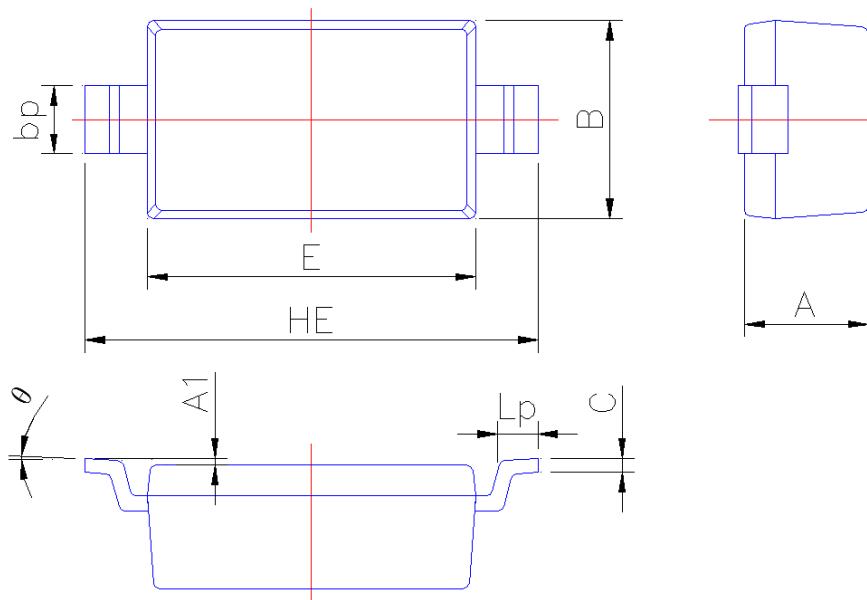


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## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



Symbol	Dimension in Millimeters	
	Min	Max
A	0.95	1.15
A1	0.01	0.100
B	1.55	1.65
bp	0.50	0.70
C	0.09	0.150
E	2.60	2.70
HE	3.45	3.85
Lp	0.20	0.45
θ	0°	5°