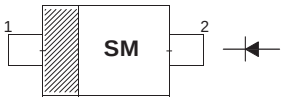
SOD-123 Plastic-Encapsulate Diodes

B16W Schottky Barrier Diode

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: "**SM**"
Simplified outline SOD-123 and symbol

FEATURES

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

Marking: SM

MAXIMUM RATINGS(Ta=25℃ unless otherwise noted)

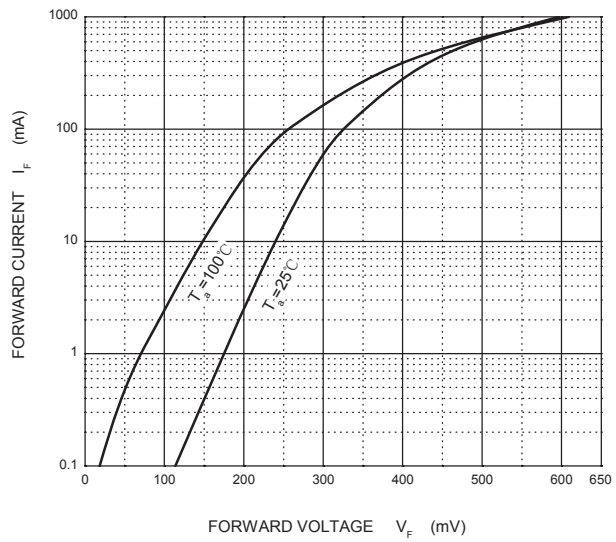
Symbol	Parameter	Value	Unit
V_{RRM}	Maximum recurrent peak reverse voltage	60	V
V_{RMS}	Maximum RMS voltage	42	
V_{DC}	Maximum DC blocking voltage	60	
I_F	Continuous forward current	1	A
I_{FSM}	Non-repetitive Peak forward surge current@t=8.3ms	10	
P_{tot}	Total power dissipation	350	mW
$R_{\theta JA}$	Thermal resistance junction to ambient air	357	℃/W
T_J	Junction temperature	150	℃
T_{stg}	storage temperature	-55~+150	℃

ELECTRICAL CHARACTERISTICS(Ta=25℃ unless otherwise specified)

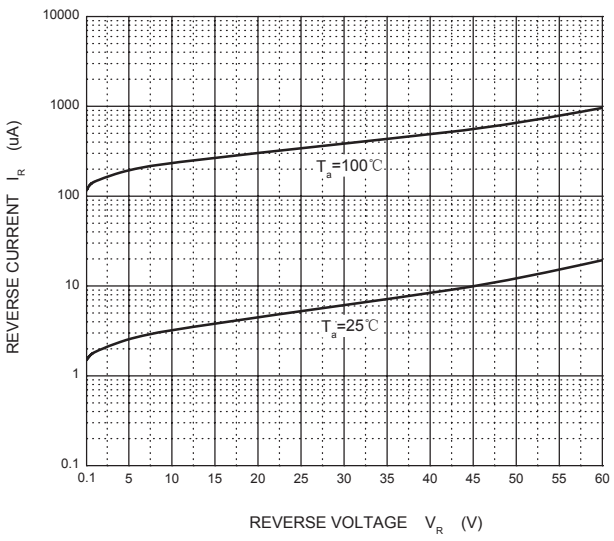
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Maximum instantaneous forward voltage	V_F	I_F=1A			0.7	V
Maximum DC reverse current at rated DC blocking voltage	I_R	V_R=60V			0.1	mA
Total capacitance	C_{tot}	V_R=4V,f=1MHz			120	pF

Typical Characteristics

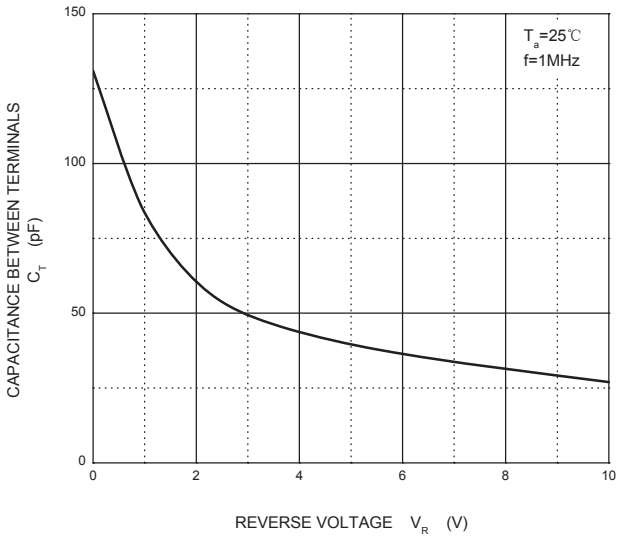
Forward Characteristics



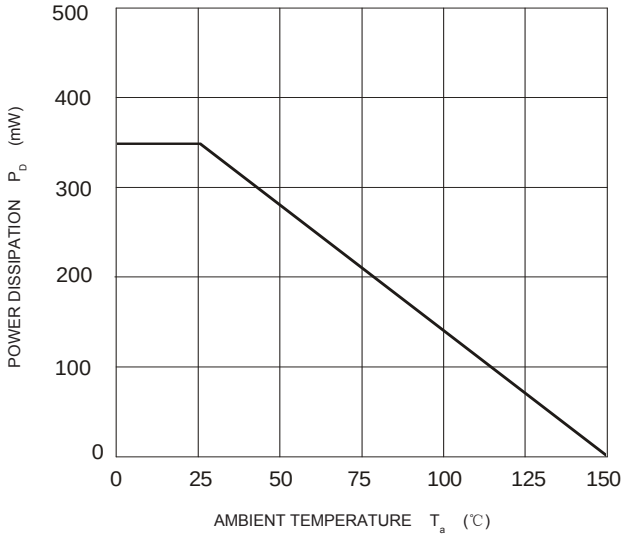
Reverse Characteristics



Capacitance Characteristics

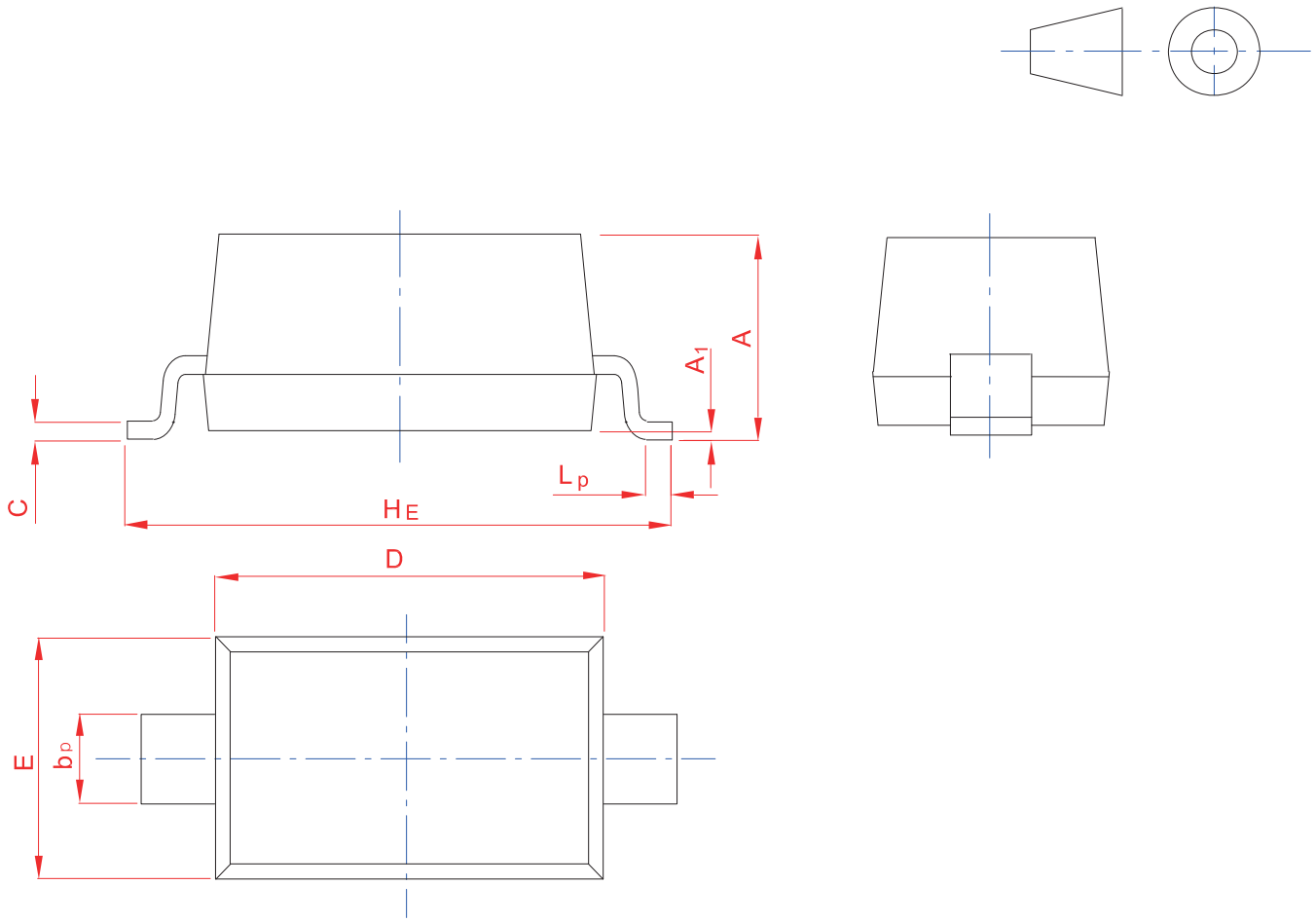


Power Derating Curve



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads **SOD-123**



UNIT	A	b_p	C	D	E	H_E	A_1	L_p
mm	1.20 0.90	0.60 0.50	0.135 0.100	2.75 2.55	1.65 1.55	3.85 3.55	0.10 0.01	0.50 0.20