

SOD- 123 Plastic-Encapsulate Schottky Barrier Diode

Features

- High current capability
- Low forward voltage drop

Mechanical Data

- SOD-123 Small outline plastic package
- Polarity: color band denotes cathode end
- Epoxy UL: 94V-0
- Mounting position: Any



Marking: S9 SOD-123

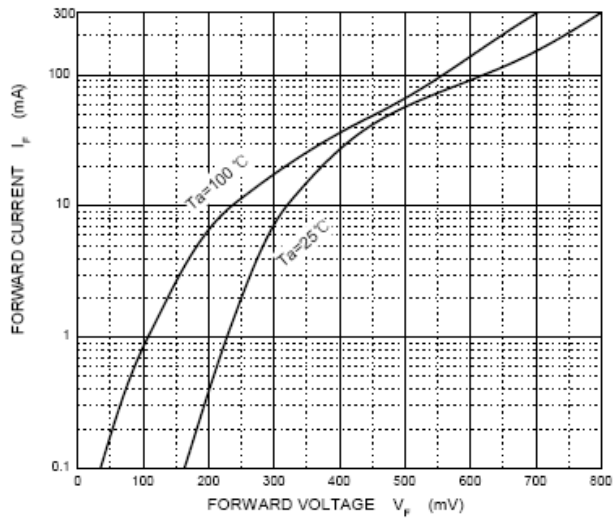
Maximum Ratings & Thermal Characteristics (T _A =25°C unless otherwise noted)			
Parameters	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	100	V
Non-repetitive Peak Forward Current	I _{FM}	350	mA
Peak forward surge current 8.3 ms single half sine-wave	I _{FSM}	750	mA
Power dissipation	P _D	500	mW
Typical thermal resistance	R _{θJA}	200	°C/W
Storage temperature range	T _{STG}	-55-+150	°C
Junction temperature	T _j	125	°C

Electrical Characteristics (T _A =25°C unless otherwise noted)						
Parameter	Symbols	Test Condition	Limits			Unit
			Min	Typ	Max	
Maximum reverse breakdown voltage	VR	IR=100uA	100			V
Maximum reverse current	IR	VR=1.5V			0.3	uA
		VR=10V			0.5	
		VR=50V			1.0	
		VR=75V			2.0	
Maximum forward voltage	VF	IF=0.1mA			250	mV
		IF=10mA			450	
		IF=25mA			1000	
Type junction capacitance	C _j	VR=0V, f=1MHZ		20		pF
		VR=1.0V, f=1MHZ		12		

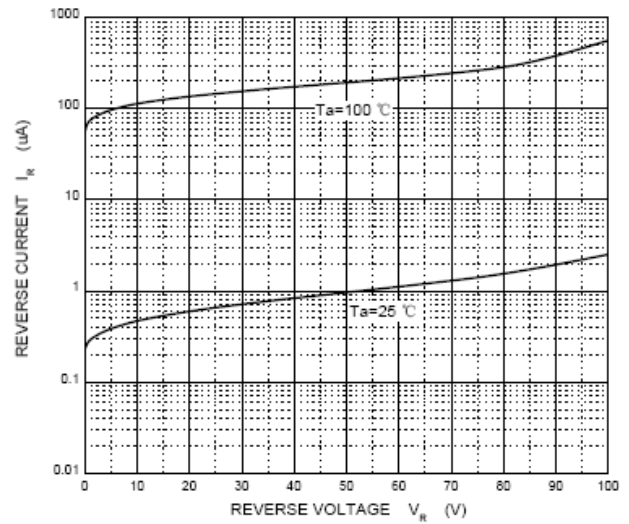
Ratings and Characteristics Curves

($T_A = 25^\circ\text{C}$ unless otherwise noted)

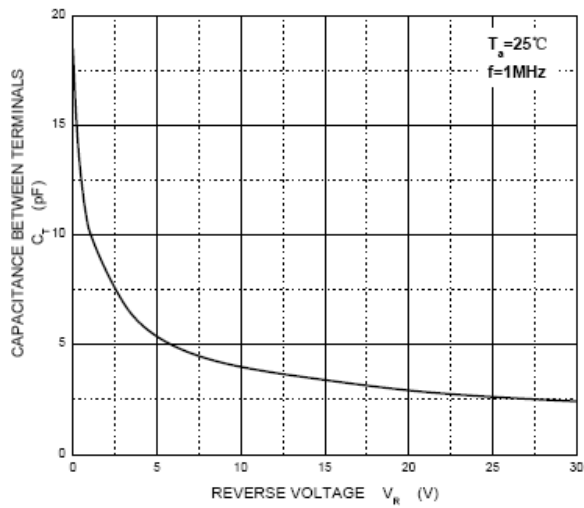
Forward Characteristics



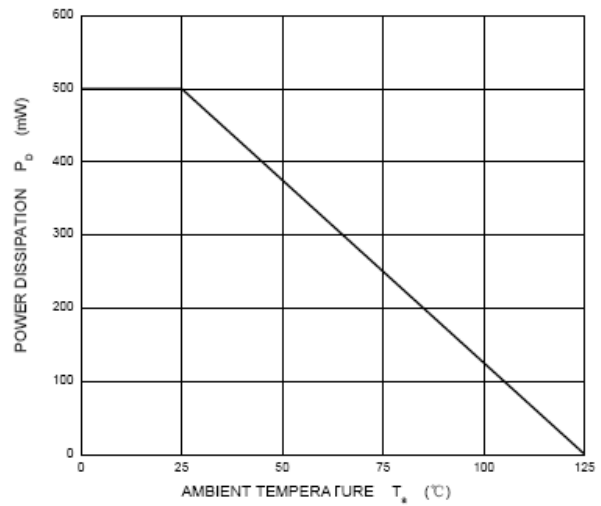
Reverse Characteristics



Capacitance Characteristics

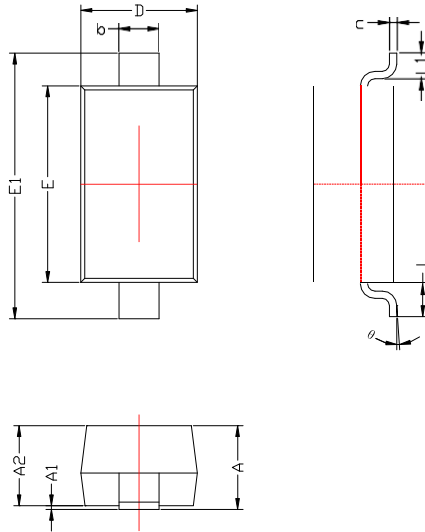


Power Derating Curve



Package Outline Dimensions

millimeters



SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	1.050	1.250
A1	0.000	0.100
A2	1.050	1.150
b	0.450	0.650
c	0.080	0.150
D	1.500	1.700
E	2.600	2.800
E1	3.550	3.850
L	0.500REF	
L1	0.250	0.450
θ	0°	8°

Revision History

Document Version	Date of release	Description of changes
Rev.A	2015.04.10	First issue

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