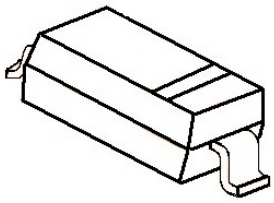
SOD-123 Plastic-Encapsulate Schottky Barrier Diode

Features

- High Current Capability
- Low Forward Voltage Drop

SOD-123



Mechanical Data

- SOD-123 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any

Marking: L9

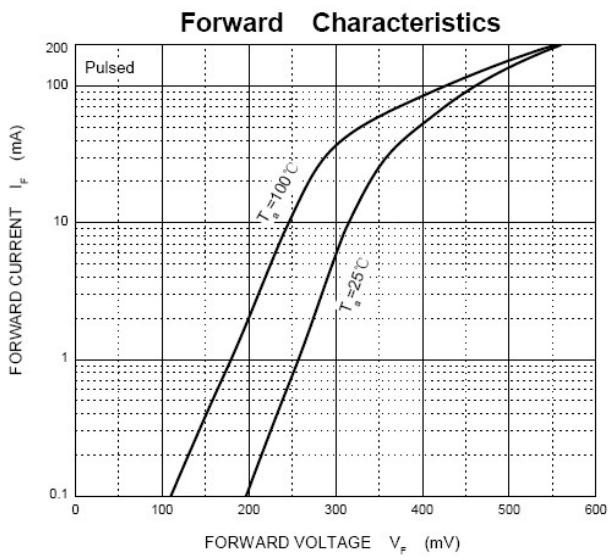
Maximum Ratings & Thermal Characteristics (T_A=25℃ unless otherwise noted.)

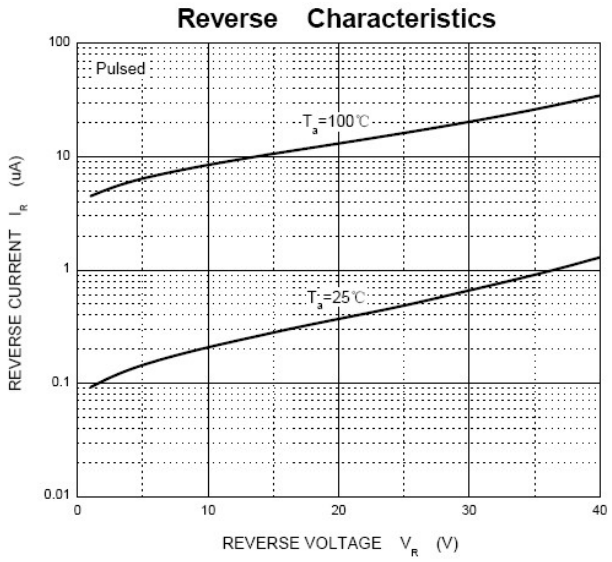
Parameters	Symbol	Limit	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	30	V
Maximum RMS voltage	V_{RMS}	21	V
Maximum DC blocking voltage	V_{DC}	30	V
Maximum average forward rectified current	I_{FM}	300	mA
Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	600	mA
Typical thermal resistance	$R_{\theta JA}$	250	℃/W
Power Dissipation	PD	500	mW
Storage temperature range	T_{STG}	-50-+150	℃

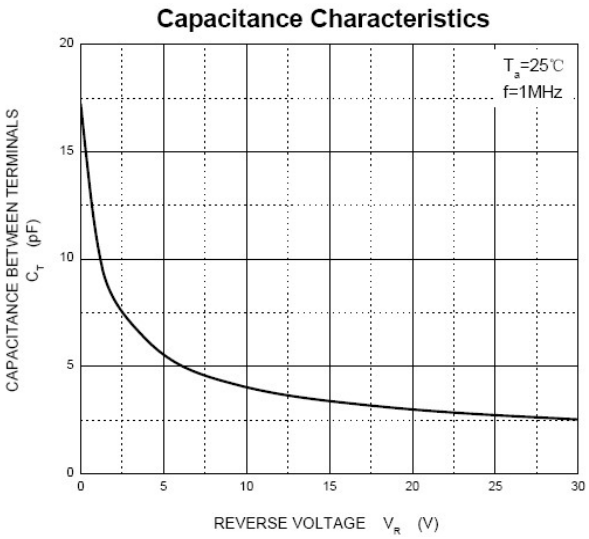
Electrical Characteristics (T_A=25℃ unless otherwise noted.)

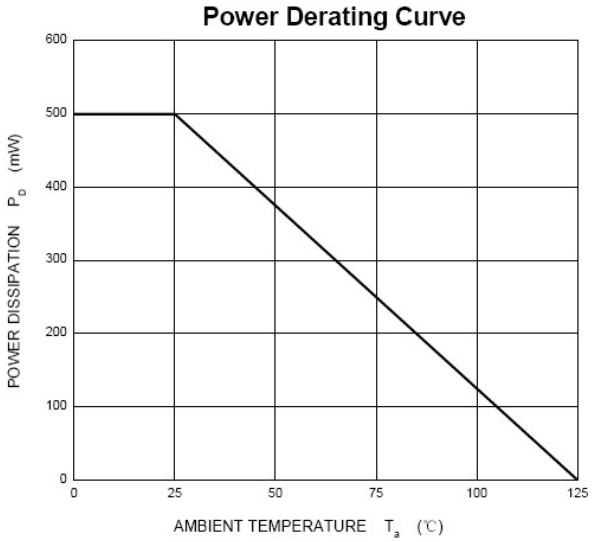
Parameters	Symbol	Test conditions	Min	Typ	Max	Unit
Maximum forward voltage	V_{F1}	IF = 0.1mA			240	mV
	V_{F2}	IF = 1.0mA			320	
	V_{F3}	IF = 10mA			400	
	V_{F4}	IF = 30mA			500	
	V_{F5}	IF = 100mA			800	
Maximum reverse breakdown voltage	VR	IR=100uA	30			V
Maximum reverse current	IR	VR=25V			2.0	uA
Type junction capacitance	Cj	VR = 1.0V, f = 1MHz			10	pF

Typical Characteristics

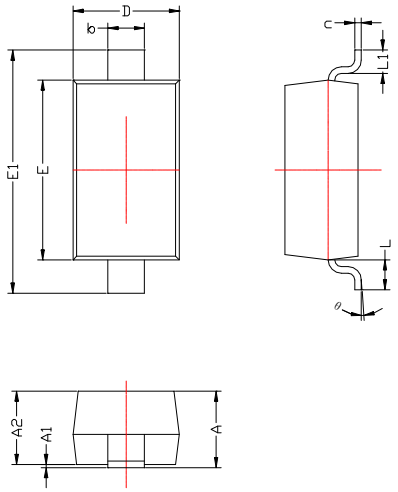








SOD-123 Package Outline



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°