



Plastic-Encapsulate Schottky Barrier Diode

Features

- Fast Switching
- Low Forward Voltage

SOD-523



Mechanical Data

- SOD-523 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Epoxy UL: 94V-0
- Mounting Position: Any

Marking: 43

Maximum Ratings & Thermal Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

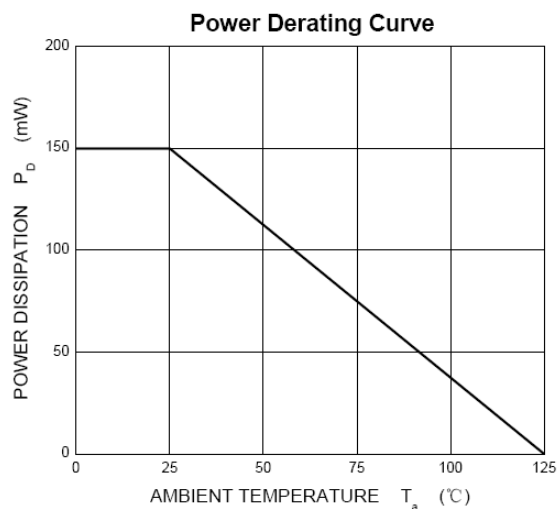
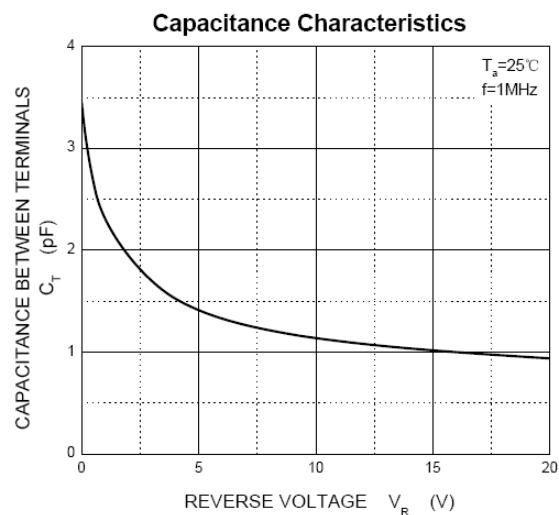
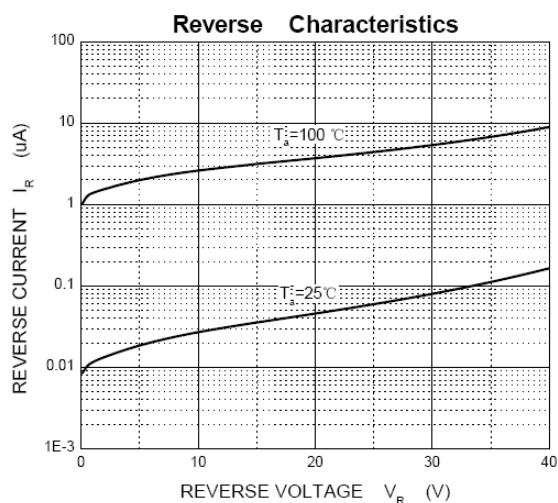
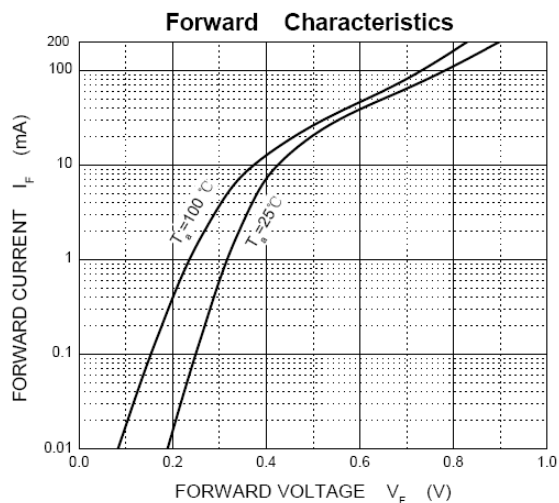
Parameters	Symbol	Limit	Unit
Peak repetitive peak reverse voltage Working peak reverse voltage DC blocking voltage	VRRM VRWM VR	40	V
Maximum average forward rectified current	IFM	200	mA
Typical thermal resistance	R θ JA	667	$^{\circ}\text{C}/\text{W}$
Power Dissipation	PD	150	mW
Junction Temperature	TJ	125	$^{\circ}\text{C}$
Storage temperature range	TSTG	-50-+150	$^{\circ}\text{C}$

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

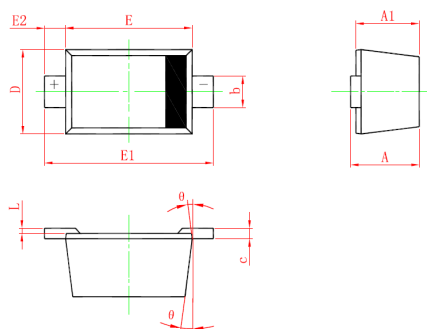
Parameters	Symbol	Test conditions	Min	Typ	Max	Unit
Forward voltage	VF1	IF = 1mA			380	mV
	VF2	IF = 40mA			1000	
Reverse breakdown voltage	VR	IR=10uA	40			V
Reverse voltage leakage current	IR	VR=30V			0.2	uA
Diode capacitance	CD	VR = 0V, f = 1MHz			5	pF
Reverse Recovery Time	Trr	Irr=1mA, IR=If=10mA RL=100 Ω			5	nS



Typical Characteristics

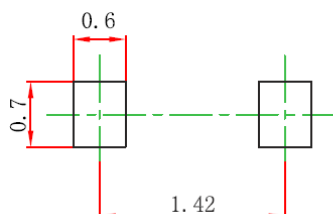


SOD-523 Package Outline



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.510	0.770	0.020	0.031
A1	0.500	0.700	0.020	0.028
b	0.250	0.380	0.010	0.015
c	0.080	0.150	0.003	0.006
D	0.750	0.850	0.030	0.033
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
θ	7° REF		7° REF	

SOD-523 Suggested Pad Layout



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