



SOD-523 Plastic-Encapsulate Schottky Barrier Diode

Features

- High Current Capability
- Low Forward Voltage Drop

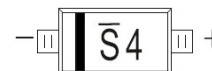
Mechanical Data

- SOD-523 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any

SOD-523



Marking:



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

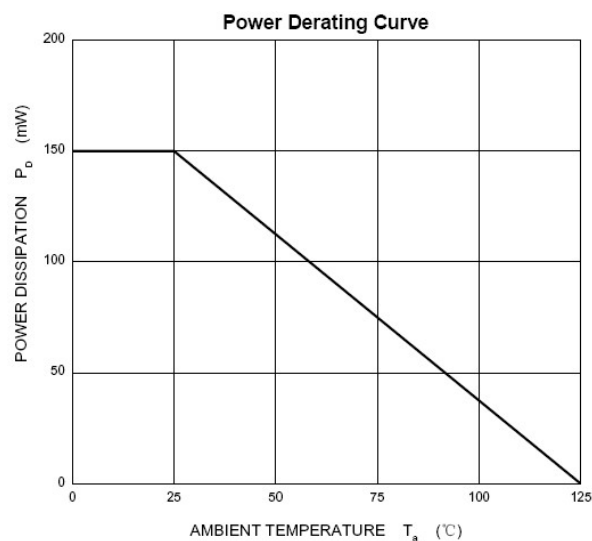
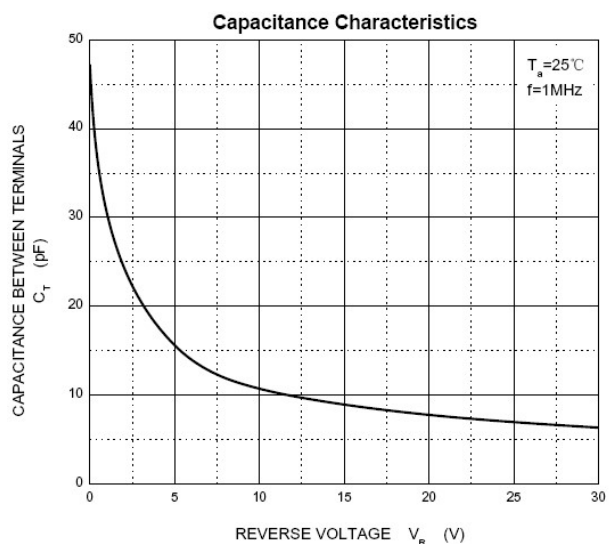
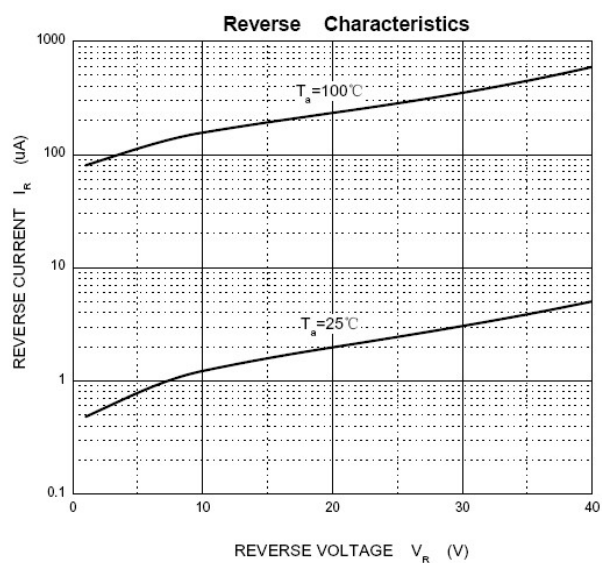
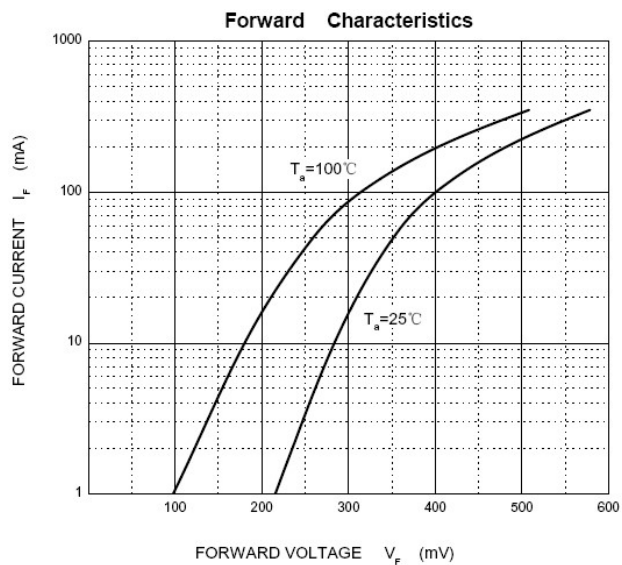
Parameters	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	VRRM	40	V
Maximum RMS voltage	VRMS	28	V
Maximum DC blocking voltage	VDC	40	V
Maximum average forward rectified current	IFM	350	mA
Peak forward surge current 8.3 ms single half sine-wave	IFSM	2	A
Power Dissipation	PD	150	mW
Typical thermal resistance	R θ JA	667	$^{\circ}\text{C}/\text{W}$
Operating junction temperature	T _J	125	$^{\circ}\text{C}$
Storage temperature range	TSTG	-50-+150	$^{\circ}\text{C}$

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

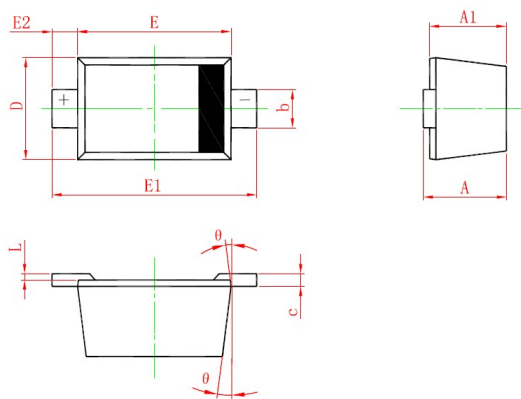
Parameters	Symbol	Test conditions	Min	TYP	Max	Unit
Maximum forward voltage	V _F	IF = 1mA IF = 5mA IF = 20mA IF = 200mA		0.27 0.32	0.37 0.60	V
Maximum reverse breakdown voltage	V _R	IR=100uA	40			V
Maximum reverse current	I _R	VR=30V VR=20V VR=10V			5 2 1	uA
Total capacitance	C _{tot}	VR = 0V, f = 1MHz		50		pF
Reverse recovery time	T _{rr}	IF=IR=200mA, Irr=0.1xIR, RL=100 Ω		10		ns



Characteristics Curves



SOD-523 Package Outline Dimensions



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	0.350	0.010	0.014
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	