

Descriptions

This is SOD-523 Plastic-Encapsulate Schottky Barrier Diode

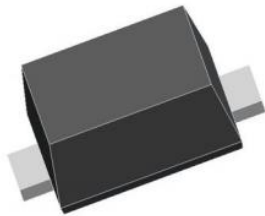
Features

- High Current Capability
- Low Forward Voltage Drop

Applications

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

Pinning & Marking



SOD-523



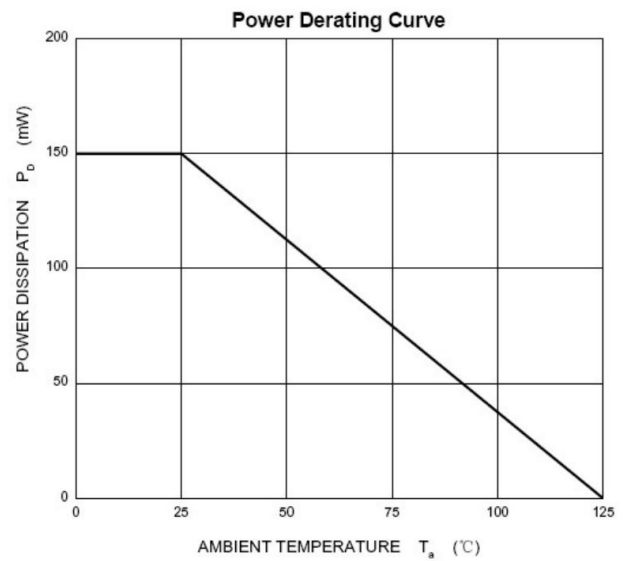
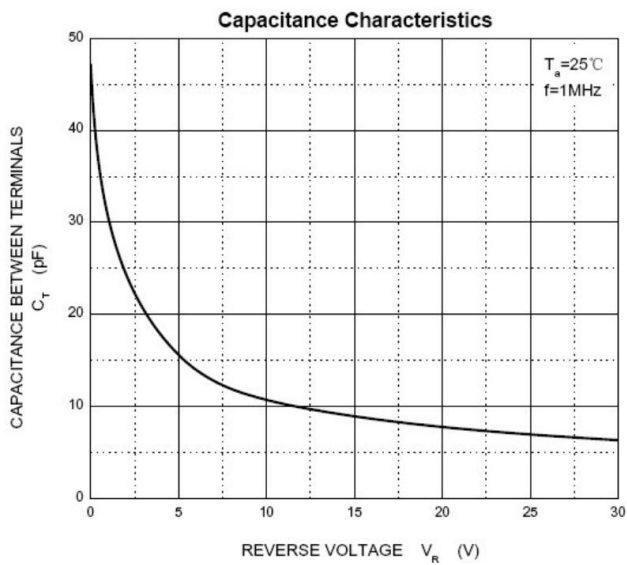
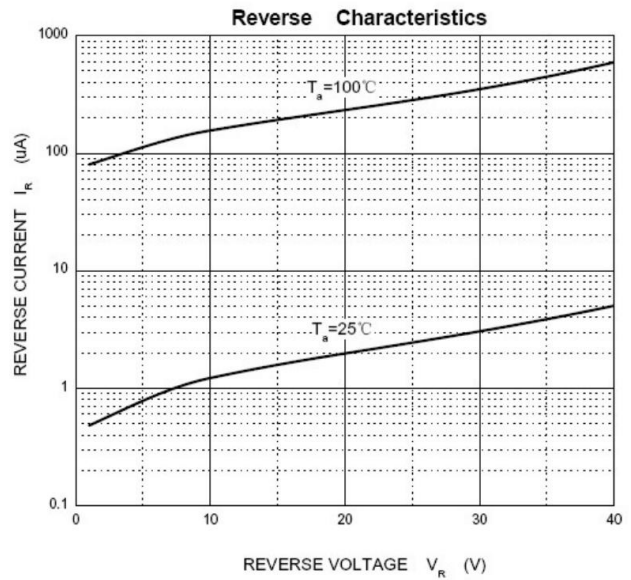
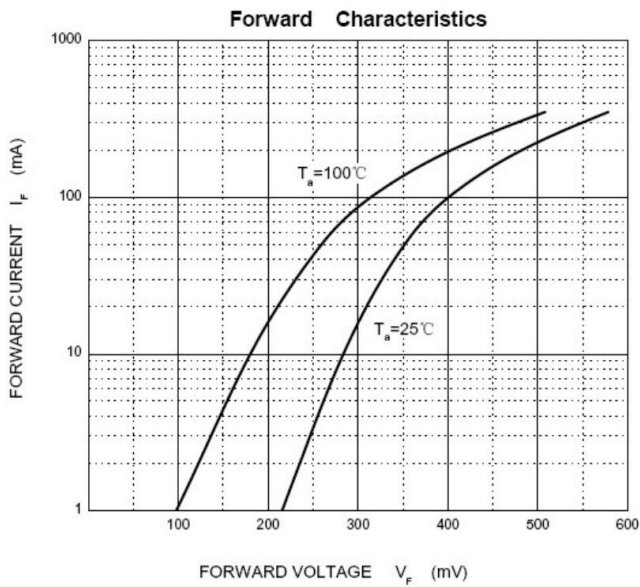
Marking

Maximum Ratings&Thermal Characteristics(Ratings at 25°C)

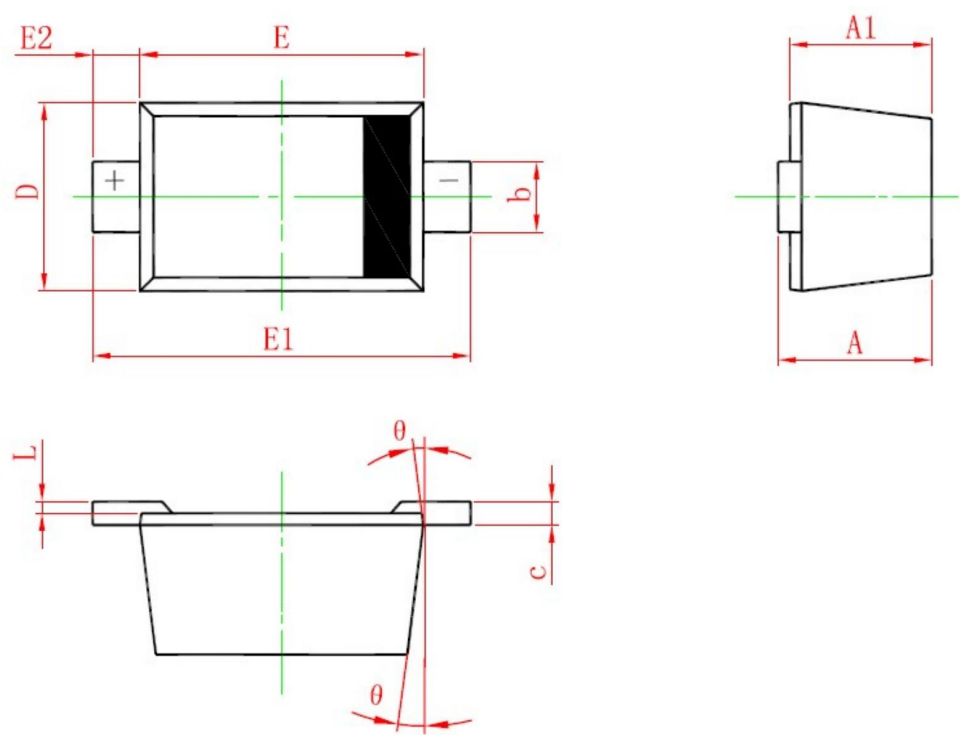
Parameters	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	40	V
Maximum RMS voltage	V_{RMS}	28	V
Maximum DC blocking voltage	V_{DC}	40	V
Maximum average forward rectified current	I_{FM}	350	mA
Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	2	A
Power Dissipation	PD	150	mW
typical thermal resistance	$R_{\theta JA}$	667	°C/W
Operating junction temperature	T_j	125	°C
Storage temperature range	TSTG	-50-+150	°C

Electrical Characteristics($T_a=25^{\circ}\text{C}$)

Parameters	Symbol	Test conditions	Min	TYP	Max	Unit
Maximum forward voltage	V_F	$I_F = 1\text{mA}$ $I_F = 5\text{mA}$ $I_F = 20\text{mA}$ $I_F = 200\text{mA}$		0.27 0.32	0.37 0.60	V
Maximum reverse breakdown voltage	V_R	$I_R=100\mu\text{A}$	40			V
Maximum reverse current	I_R	$V_R=30\text{V}$ $V_R=20\text{V}$ $V_R=10\text{V}$			5 2 1	μA
Total capacitance	C_{tot}	$V_R = 0\text{V}$, $f = 1\text{MHz}$		50		pF
Reverse recovery time	T_{rr}	$I_F=I_R=200\text{mA}$, $I_{rr}=0.1 \times I_R$, $R_L=100\ \Omega$		10		ns

Electrical Characteristics($T_a=25^{\circ}\text{C}$)

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	