

FEATURES

Small surface mounting type

Low I_R

High reliability

SOD-523



MARKING: S

Electrical Ratings @ $T_A=25^{\circ}\text{C}$

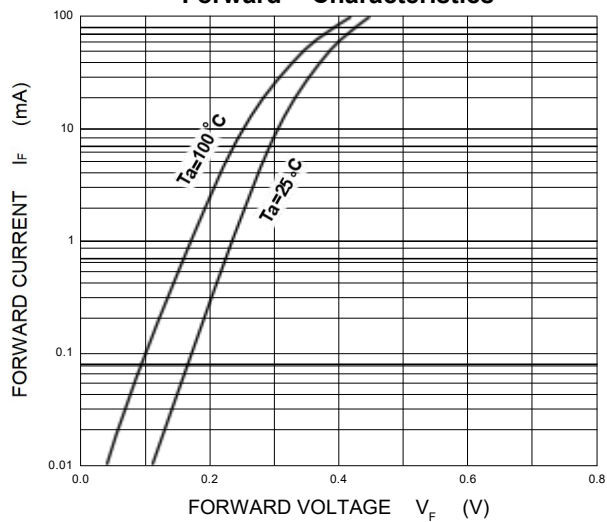
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	V _F		0.304 0.446	0.39 0.55	V	I _F =10mA
			I _F =100mA			
Reverse current	I _R		0.605 2.837	1 10	μA	V _R =10V
			V _R =40V			

Maximum Ratings and Electrical Characteristics, Single Diode @ $T_A=25^{\circ}\text{C}$

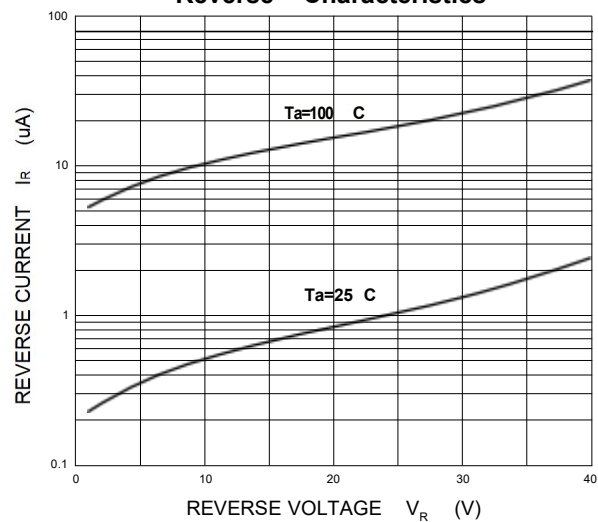
Parameter	Symbol	Limit	Unit
DC reverse voltage	V_R	40	V
Mean rectifying current	I_o	0.2	A
Non-repetitive peak forward surge current@ $t=8.3\text{ms}$	I_{FSM}	1	A
Power Dissipation	P_D	150	mW
Thermal resistance from junction to ambient	$R_{\theta JA}$	667	$^{\circ}\text{C/W}$
Operating Junction Temperature Range	T_J	-40~+125	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55~+150	

Typical Characteristics

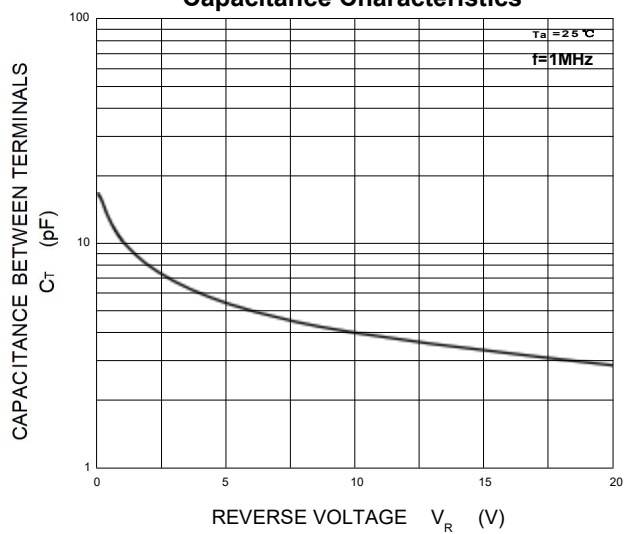
Forward Characteristics



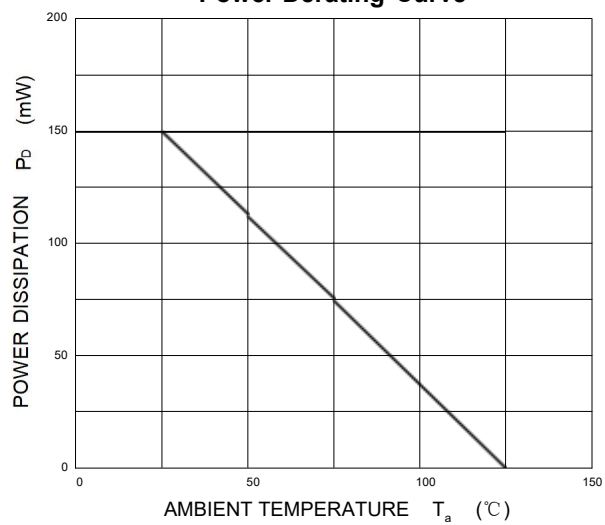
Reverse Characteristics



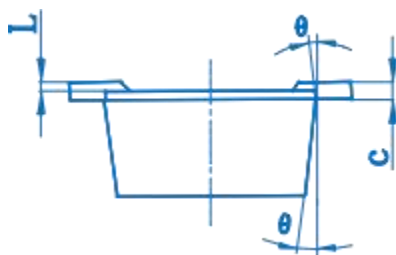
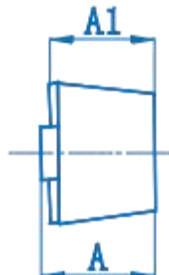
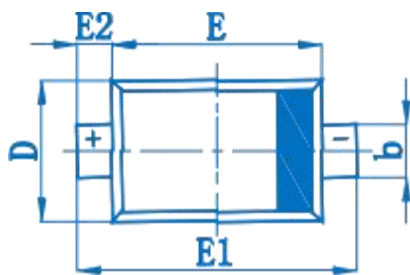
Capacitance Characteristics



Power Derating Curve

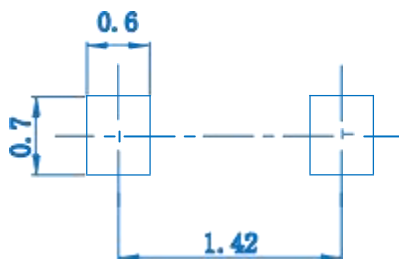


SOD-523 Package Outline Dimensions



symbol	imensions In Millimeters		imensions 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	

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.