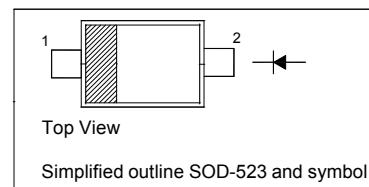


GENERAL PURPOSE PIN DIODES

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



FEATURE

- Low diode capacitance
- Low diode forward resistance
- Marking: O

Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

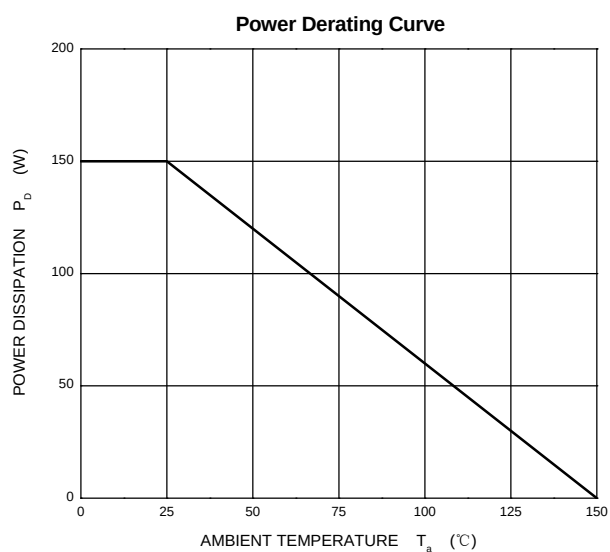
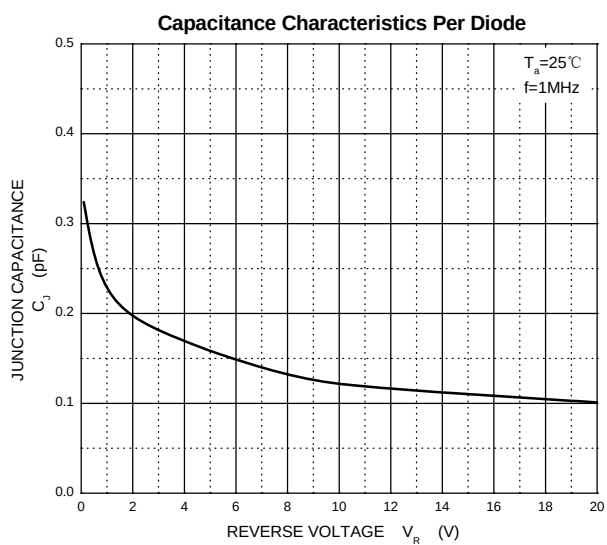
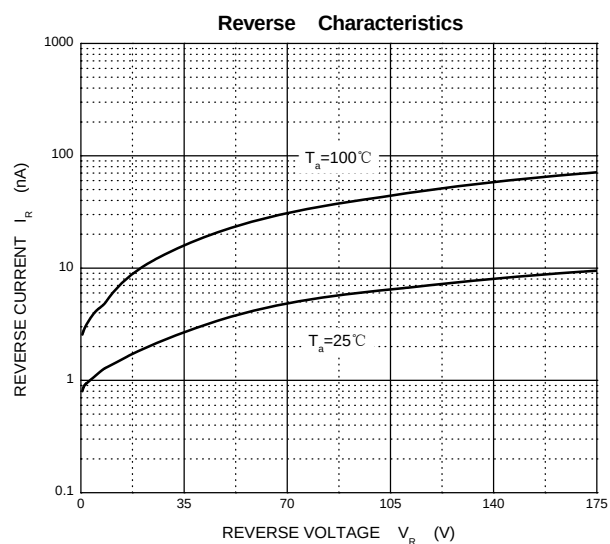
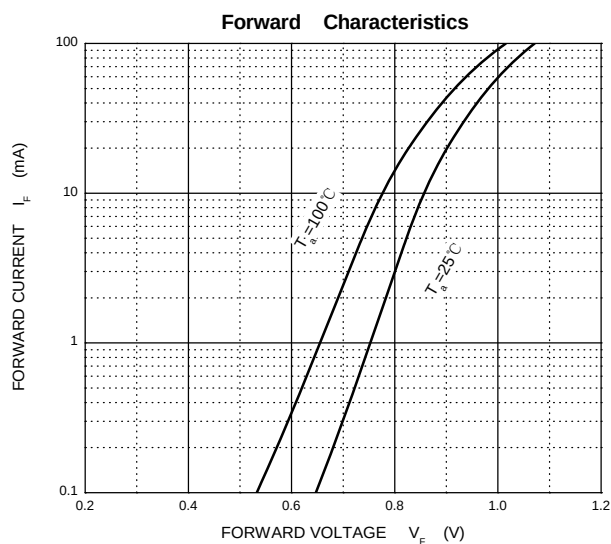
Parameter	Symbol	Limit	Unit
Continuous Reverse Voltage	V_R	150	V
Continuous Forward Current	I_F	100	mA
Power Dissipation	P_D	150	mW
Thermal Resistance from Junction to Soldering Point	$R_{\theta JS}$	85	°C/W
Junction Temperature	T_j	-55~+150	°C
Storage Temperature	T_{STG}	-55~+150	°C

Electrical Ratings @Ta=25°C

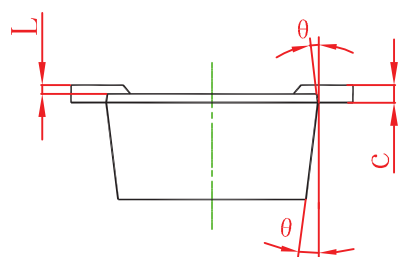
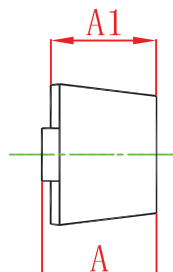
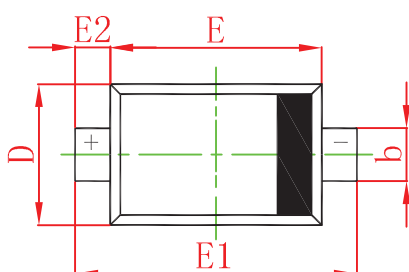
Parameter	Symbol	Min	Typ	Max	Unit	Condition
Continuous reverse voltage	V_R	150			V	$I_R=10\mu A$
Forward voltage	V_F			1.1	V	$I_F=50mA$
Reverse current	I_R			10	μA	$V_R=150V$
Diode capacitance	C_{d1}		0.4*		pF	$V_R=0V, f=1MHz$
	C_{d2}			0.55	pF	$V_R=1V, f=1MHz$
	C_{d3}			0.35	pF	$V_R=5V, f=1MHz$
Diode forward resistance	r_D			9	Ω	$I_F=0.5mA, f=100MHz; note1$
	r_D			6.5	Ω	$I_F=1mA, f=100MHz; note1$
	r_D			2.5	Ω	$I_F=10mA, f=100MHz; note1$

Note 1. Guaranteed on AQL basis: inspection level S4,AQL 1.0.

Typical Characteristics

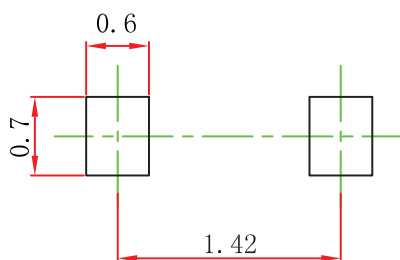


SOD-523 Package Outline Dimensions



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	

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.