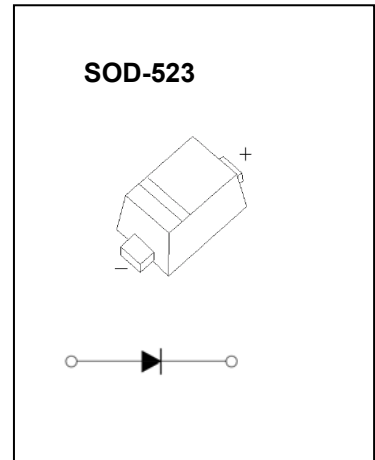


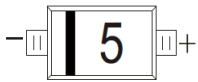
**FEATURES**

- Small surface mounting type
- Low reverse current and low forward voltage
- High reliability

**SOD-523 Plastic-Encapsulate Diodes**



**MARKING: 5**



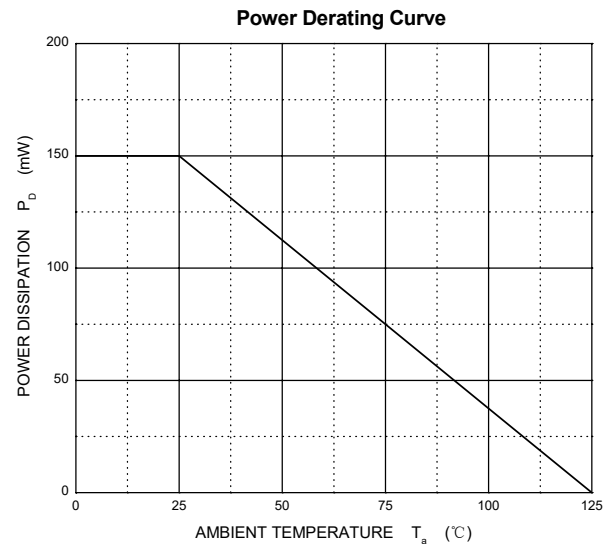
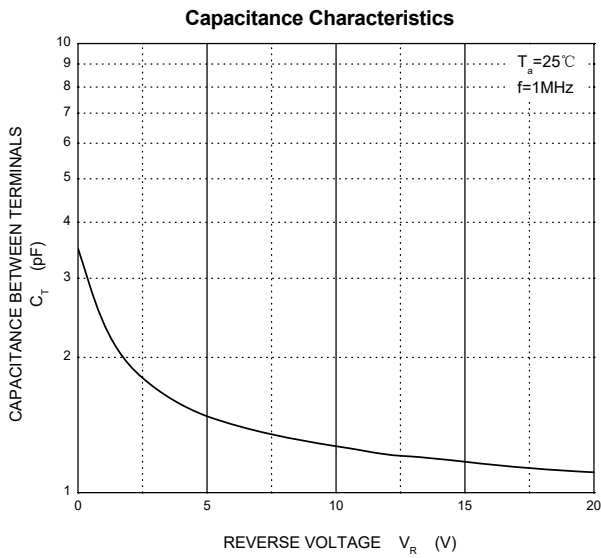
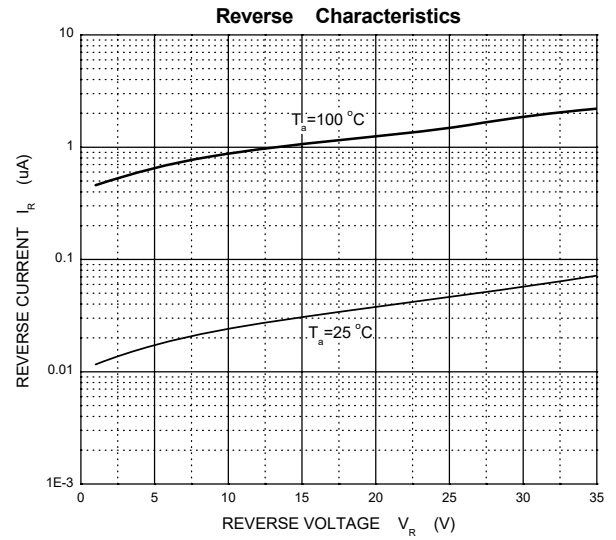
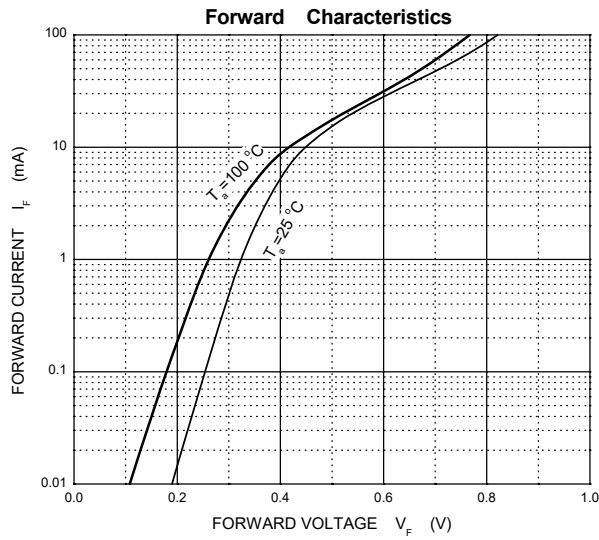
**Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C**

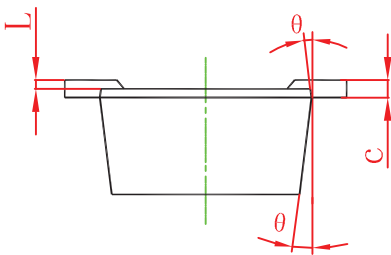
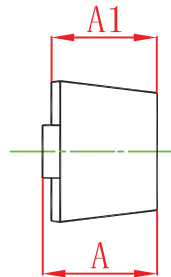
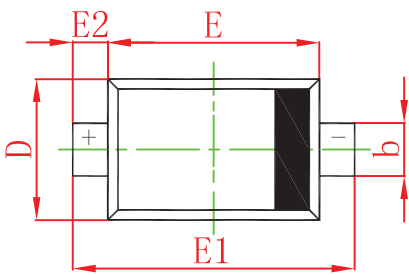
Parameter	Symbol	Limit	Unit
Peak reverse voltage	$V_{RM}$	40	V
DC reverse voltage	$V_R$	40	V
Mean rectifying current	$I_O$	30	mA
Non-repetitive Peak Forward Surge Current@t=8.3ms	$I_{FSM}$	200	mA
Power dissipation	$P_D$	150	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	667	°C/W
Operating Junction Temperature Range	$T_j$	-40 ~ +125	°C
Storage Temperature Range	$T_{stg}$	-55 ~ +150	°C

**Electrical Ratings @Ta=25°C**

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse voltage	$V_{(BR)}$	40			V	$I_R=1mA$
Forward voltage	$V_F$	0.20		0.37	V	$I_F=1mA$
Reverse current	$I_R$	0.01		0.5	μA	$V_R=30V$
Capacitance between terminals	$C_T$	0.5	2	10	pF	$V_R=1V, f=1MHZ$

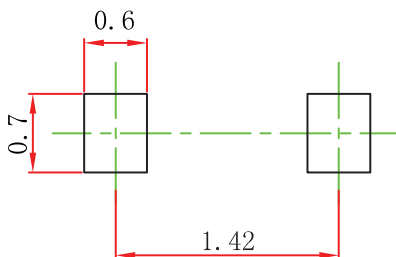
## Typical Characteristics





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.