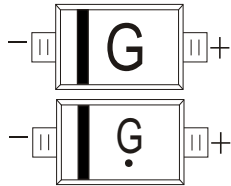


High Speed Switching Diode

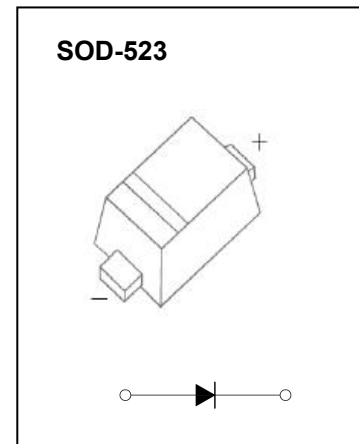
FEATURES

- Small surface mounting type
- High speed
- High reliability with high surge current handing capability

MARKING: G



The marking bar indicates the cathode  
Solid dot = Green molding compound device,  
if none, the normal device.



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

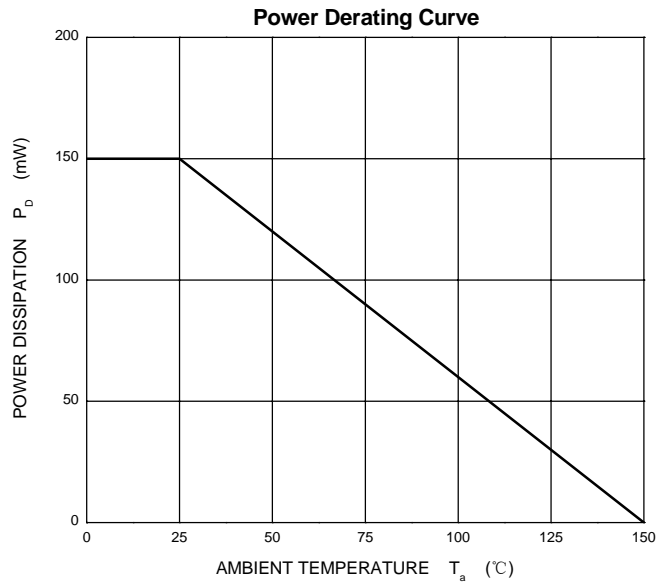
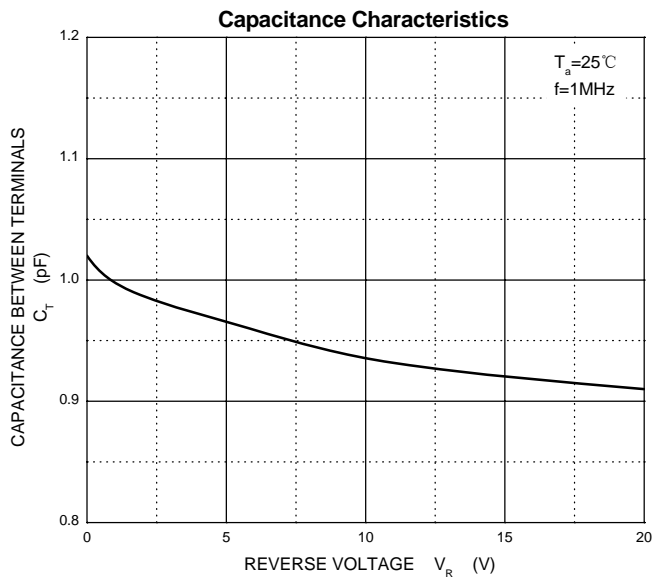
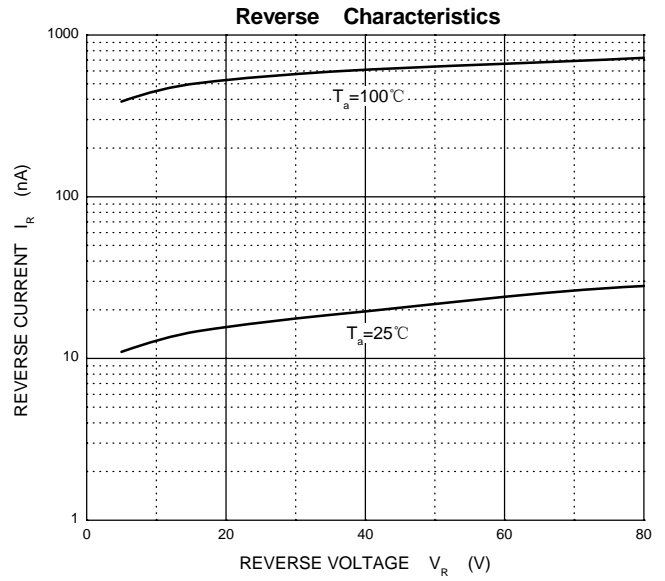
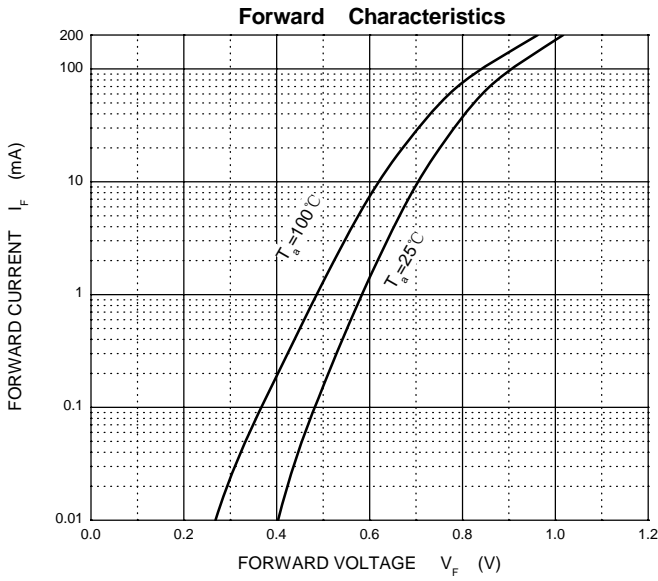
Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	85	V
DC Blocking Voltage	$V_R$	80	V
Forward Continuous Current	$I_{FM}$	200	mA
Average Rectified Output Current	$I_O$	100	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	$I_{FSM}$	2.0	A
Power Dissipation	$P_d$	150	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	833	°C/W
Junction Temperature	$T_j$	150	°C
Storage Temperature	$T_{STG}$	-55~+150	°C

Electrical Ratings @Ta=25°C

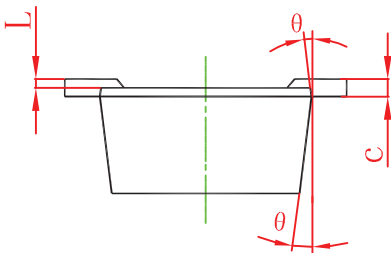
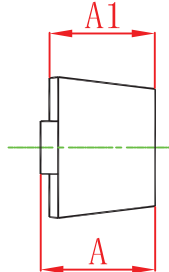
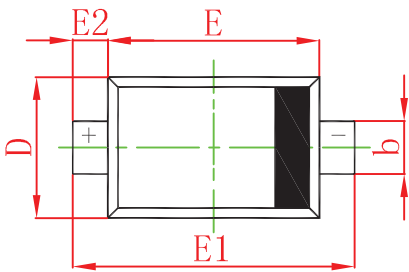
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_{F1}$		0.62		V	$I_F=1mA$
	$V_{F2}$		0.75		V	$I_F=10mA$
	$V_{F3}$			1.2	V	$I_F=100mA$
Reverse current	$I_{R1}$			0.1	μA	$V_R=30V$
	$I_{R2}$			0.5	μA	$V_R=80V$
Capacitance between terminals	$C_T$			3.0	pF	$V_R=0, f=1MHZ$
Reverse recovery time	$t_{rr}$			4	ns	$V_R=6V, I_F=10mA, R_L=100\Omega$



### Typical Characteristics

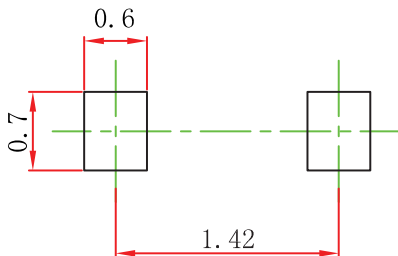


SOD-523 Package Outline Dimensions



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: ± 0.05mm.  
 3. The pad layout is for reference purposes only.