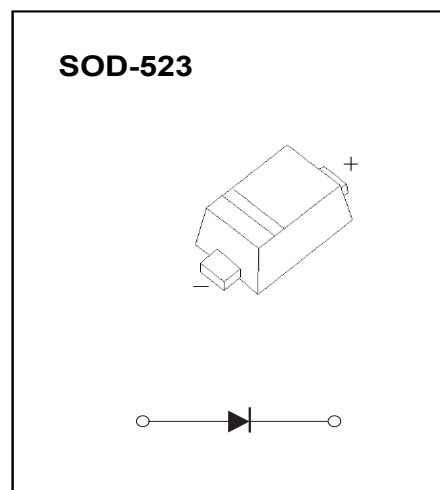
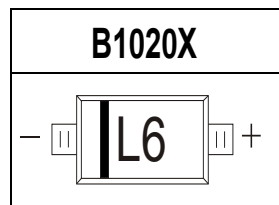


SOD-523 Plastic-Encapsulate Diodes**B1020X****SCHOTTKY BARRIER DIODE****FEATURES**

- Low Forward Voltage Drop
- Surface Mount Package

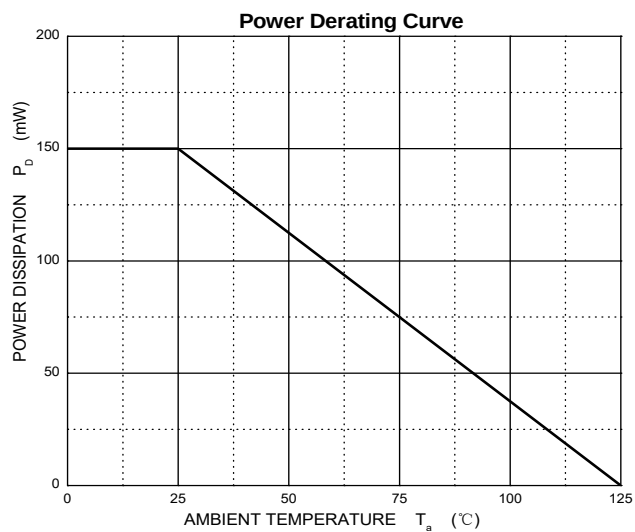
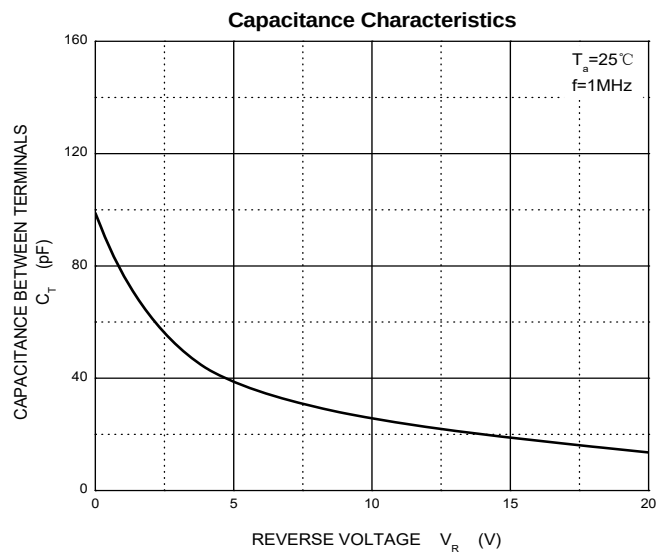
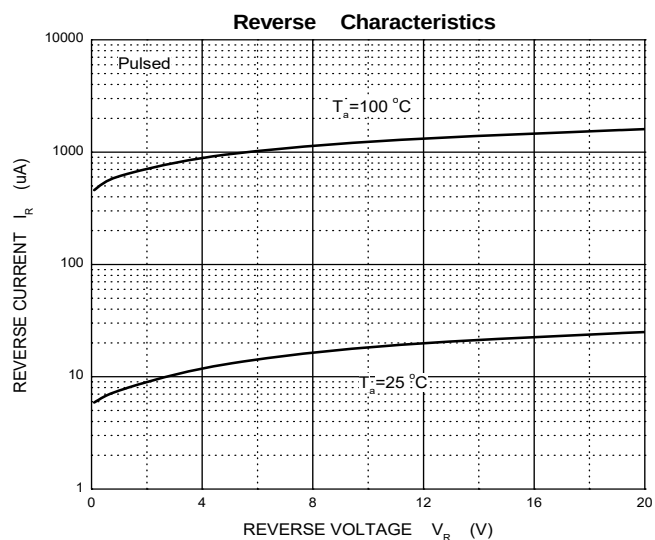
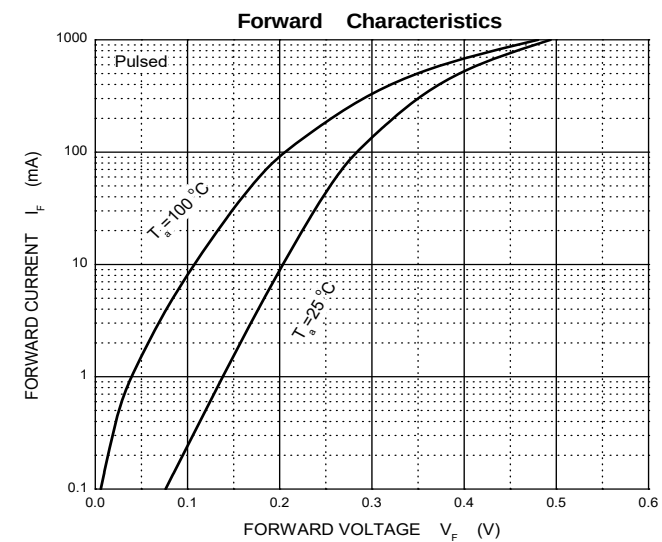
MARKING**MAXIMUM RATINGS** ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Limit	Unit
V_{RRM}	Repetitive Peak Reverse Voltage	20	V
V_{RWM}	Working Peak Reverse Voltage		
V_R	DC Blocking Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	14	V
I_{FM}	Forward Continuous Current	1.0	A
I_{FSM}	Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	4	A
P_D	Power Dissipation	150	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	667	$^{\circ}\text{C/W}$
T_j	Operating Junction Temperature Range	-40 ~ +125	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55 ~ +150	$^{\circ}\text{C}$

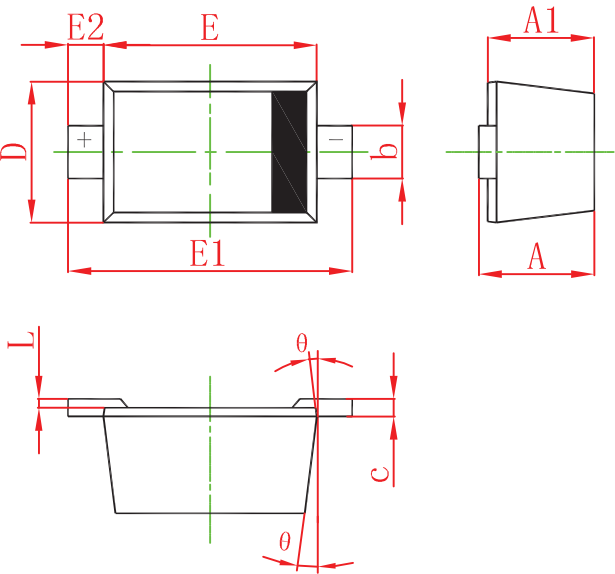
ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=250\mu\text{A}$	20			V
Reverse current	I_R	$V_R=10\text{V}$			80	μA
		$V_R=20\text{V}$			100	μA
Forward voltage	V_F	$I_F=10\text{mA}$			0.23	V
		$I_F=100\text{mA}$			0.305	V
		$I_F=1\text{A}$			0.50	V
Capacitance between terminals	C_T	$V_R=0\text{V}, f=1\text{MHz}$			120	pF

Typical Characteristics

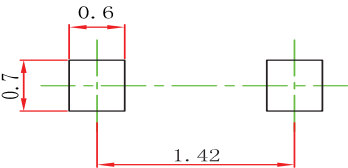


Package Outline Dimensions (SOD-523)



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	

Suggested Pad Layout (SOD-523)



- Note:
- 1.Controlling dimension:in millimeters.
 - 2.General tolerance:± 0.05mm.
 - 3.The pad layout is for reference purposes only.