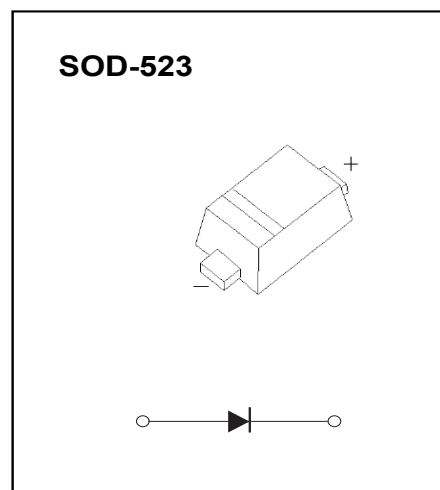
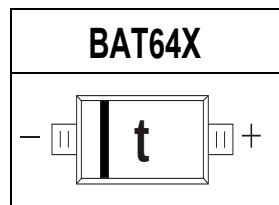


SOD-523 Plastic-Encapsulate Diodes**BAT64X****SCHOTTKY BARRIER DIODE****FEATURES**

- Low Forward Voltage Drop

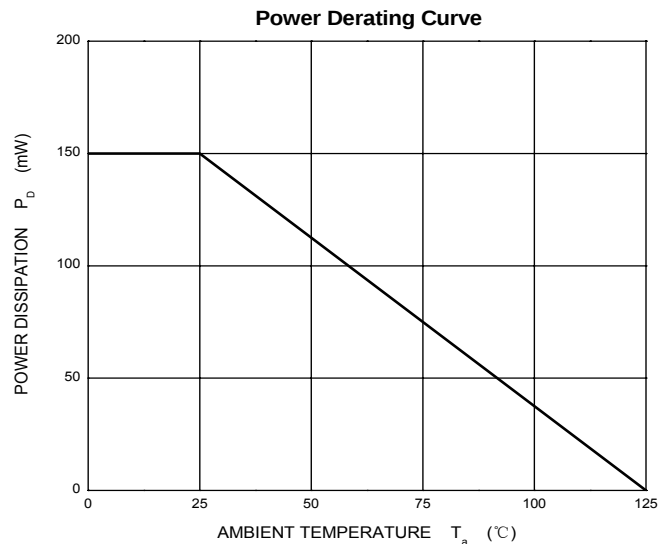
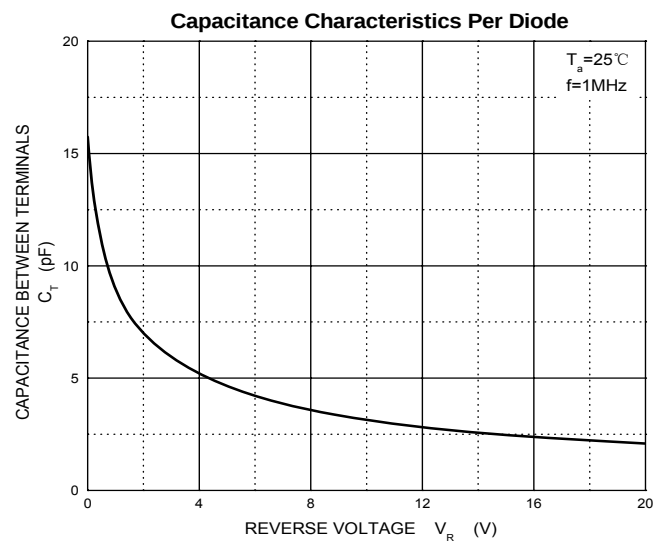
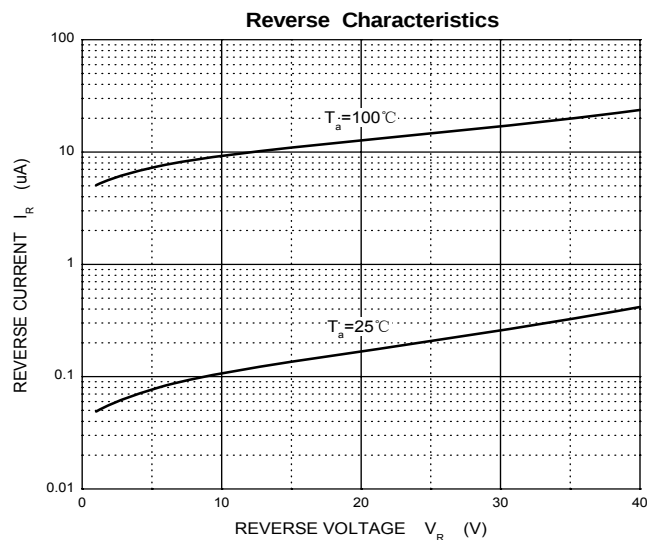
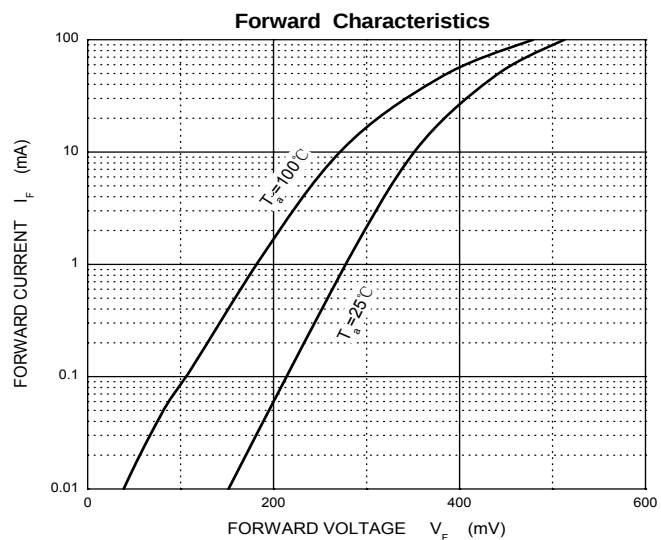
MARKING**MAXIMUM RATINGS** ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak reverse voltage DC reverse	V_{RM} V_R	40	V
Non-repetitive Peak surge forward current @ $t=8.3\text{ms}$	I_{FSM}	0.8	A
Mean rectifying current	I_O	0.25	A
Power Dissipation	P_D	150	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	667	$^{\circ}\text{C}/\text{W}$
Operating Junction Temperature Range	T_j	$-40\sim+125$	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	$-55\sim+150$	$^{\circ}\text{C}$

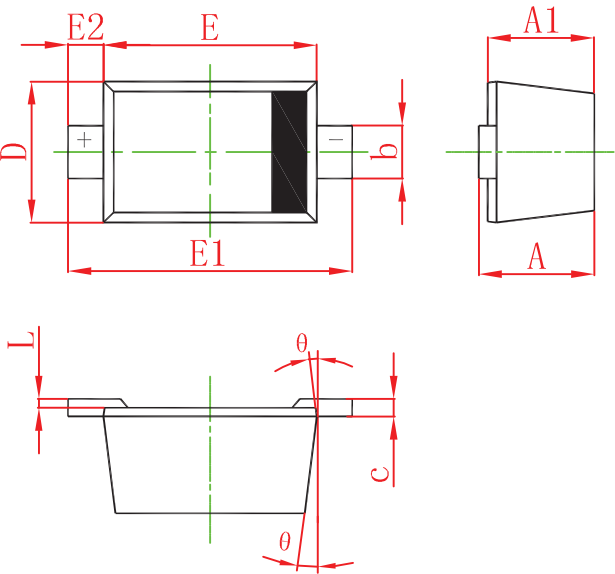
ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse breakdown voltage	V_R	40			V	$I_R=10\mu\text{A}$
Forward voltage	V_F			350 430 520 750	mV	$I_F=1\text{mA}$ $I_F=10\text{mA}$ $I_F=30\text{mA}$ $I_F=100\text{mA}$
Reverse current	I_R			2	μA	$V_R=30\text{V}$
Capacitance between terminals	C_T			6	pF	$V_R=1\text{V}, f=1\text{MHz}$
Reverse recovery time	t_{rr}			5	ns	$I_F=10\text{mA}, I_R=10\text{mA},$ $I_R=1\text{mA}, R_L=100\Omega$

Typical Characteristics

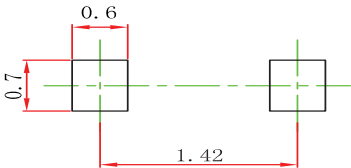


Package Outline Dimensions (SOD-523)



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.