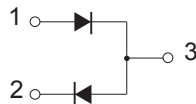
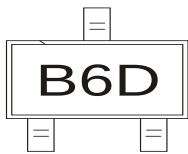
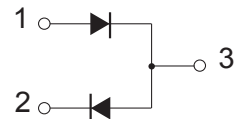
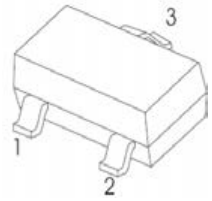


SOT-323 Plastic-Encapsulate Diodes**CMSD2004S****Switching Diodes****FEATURES**

- High Breakdown Voltage
- Designed For Applications Requiring High Voltage Capability

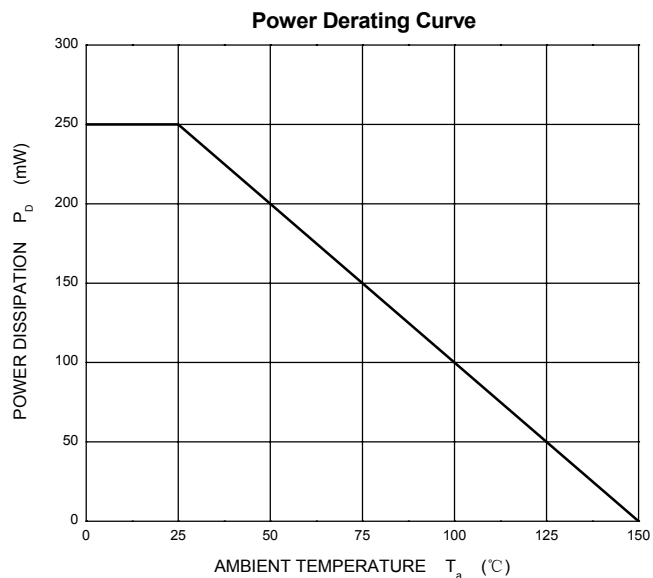
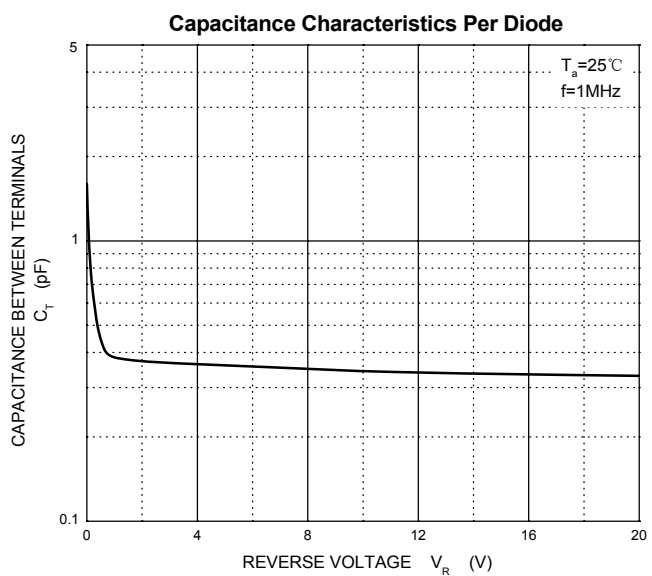
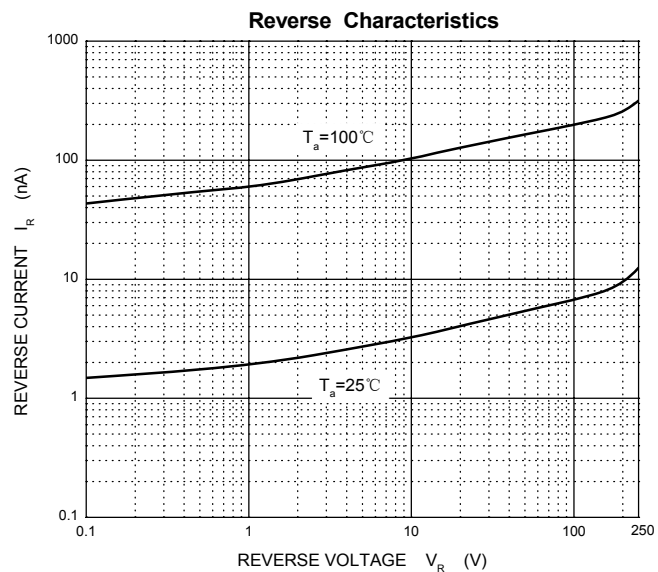
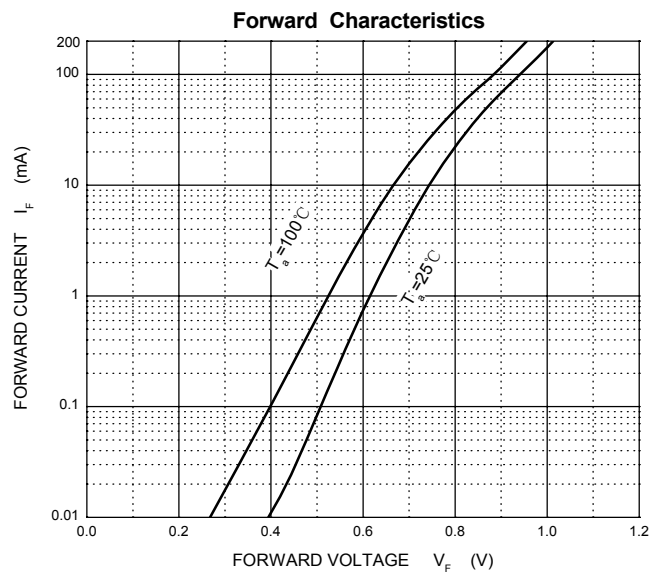
MARKING**Equivalent Circuit****SOT-323****MAXIMUM RATINGS** ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak reverse voltage	V_{RM}	300	V
DC Blocking Voltage	V_R	240	V
Average Rectified Output Current	I_o	200	mA
Continuous Forward Current	I_F	225	mA
Peak Repetitive Forward Current	I_{FRM}	625	mA
Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	2.5	A
Power Dissipation	P_D	250	mW
Thermal Resistance From Junction to Ambient	$R_{\theta JA}$	500	$^{\circ}\text{C/W}$
Operation Junction and Storage Temperature Range	T_J, T_{STG}	-55~+150	$^{\circ}\text{C}$

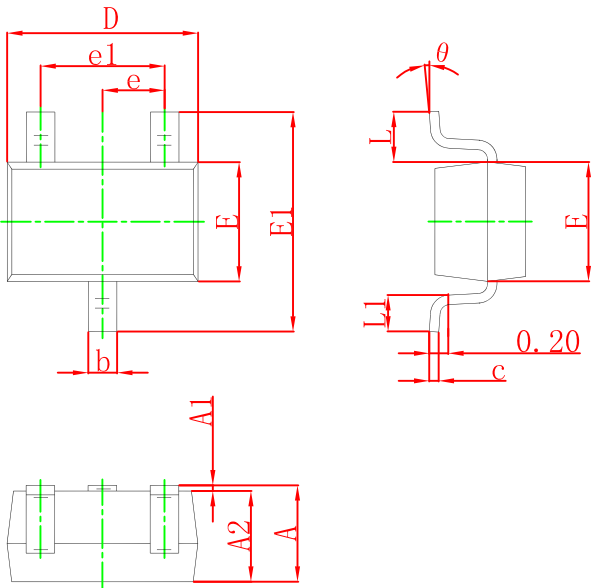
ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	240		V
Reverse voltage leakage current	I_R	$V_R=240\text{V}$		0.1	mA
Forward voltage	V_F	$I_F=100\text{mA}$		1	V
Diode capacitance	C_D	$V_R=0\text{V}, f=1\text{MHz}$		5	pF
Reveres recovery time	t_{rr}	$I_F=I_R=30\text{mA}, R_L=100\Omega$		50	ns

Typical Characteristics

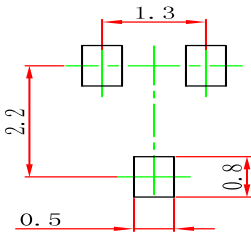


Package Outline Dimensions (SOT-323)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

Suggested Pad Layout (SOT-323)



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