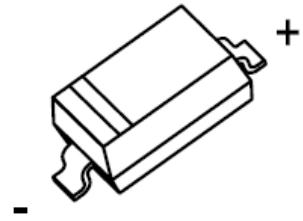


Features

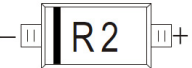
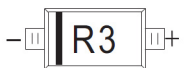
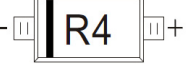
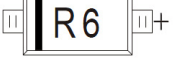
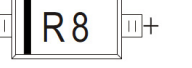
- Lead Free Finish/RoHS Compliant
- Extremely Low Thermal Resistance
- For Surface Mount Application and High Current Capability



SOD-123



Marking

GSMBR0520:R2	GSMBR0530:R3	GSMBR0540:R4	GSMBR0560:R6	GSMBR0580:R8
				

The marking bar indicates the cathode

Maximum Ratings (T_A=25°C unless otherwise noted)

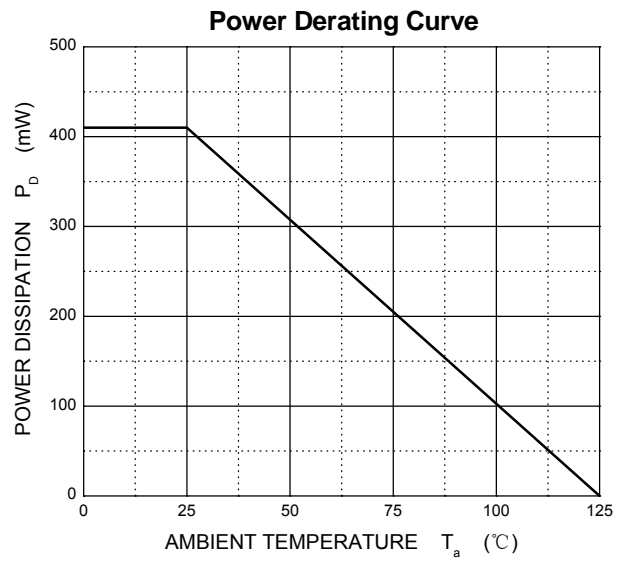
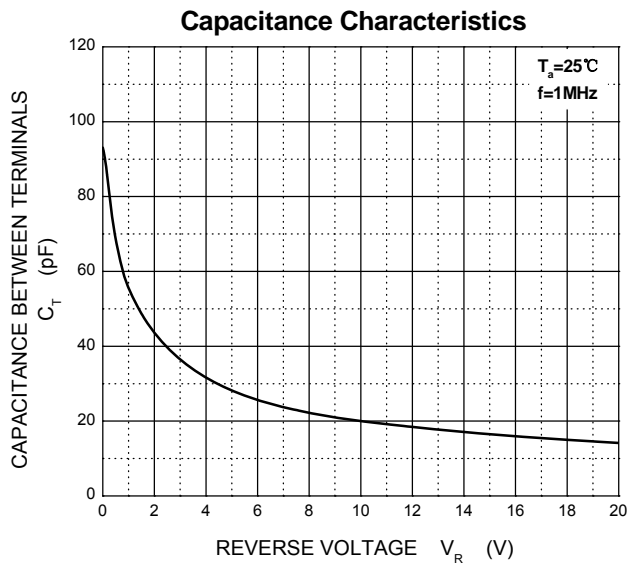
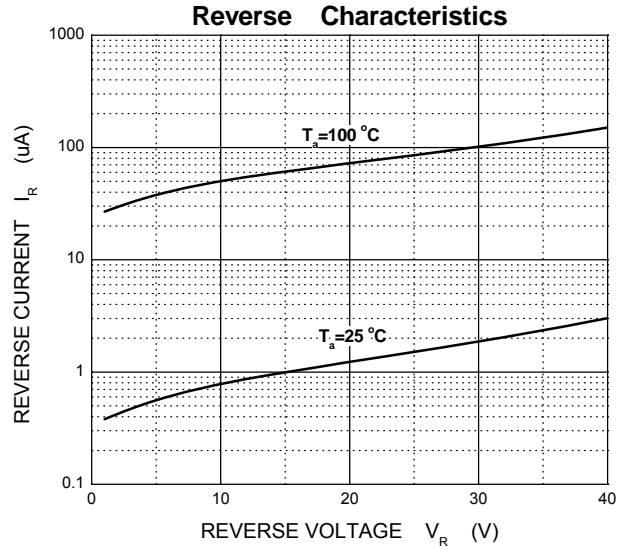
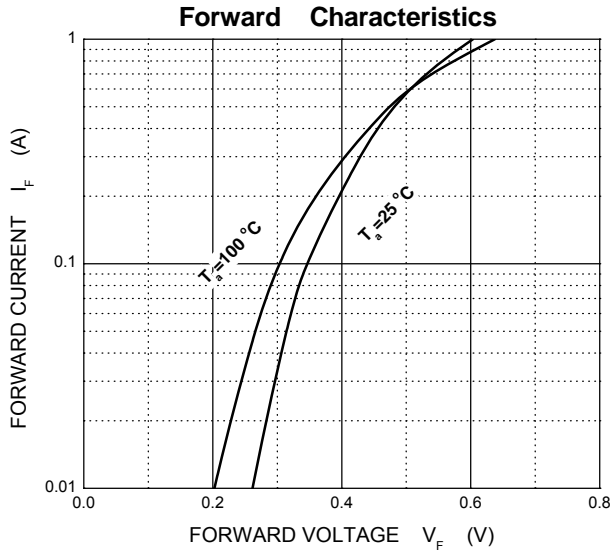
Parameter	Symbol	GSMBR	GSMBR	GSMBR	GSMBR	GSMBR	Unit
		0520	0530	0540	0560	0580	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	60	80	V
Maximum RMS Voltage	V _{RMS}	14	21	28	42	56	V
Mean Rectifying Current	I _O	0.5					A
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I _{FSM}	5.5					A
Power Dissipation	P _D	410					mW
Thermal Resistance Junction to Ambient	R _{θJA}	244					°C/W
Junction Temperature	T _J	125					°C
Storage Temperature	T _{STG}	-55 to +150					°C

GSMBR0520-GSMBR0580 **Schottky Barrier Diodes**

Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)=2

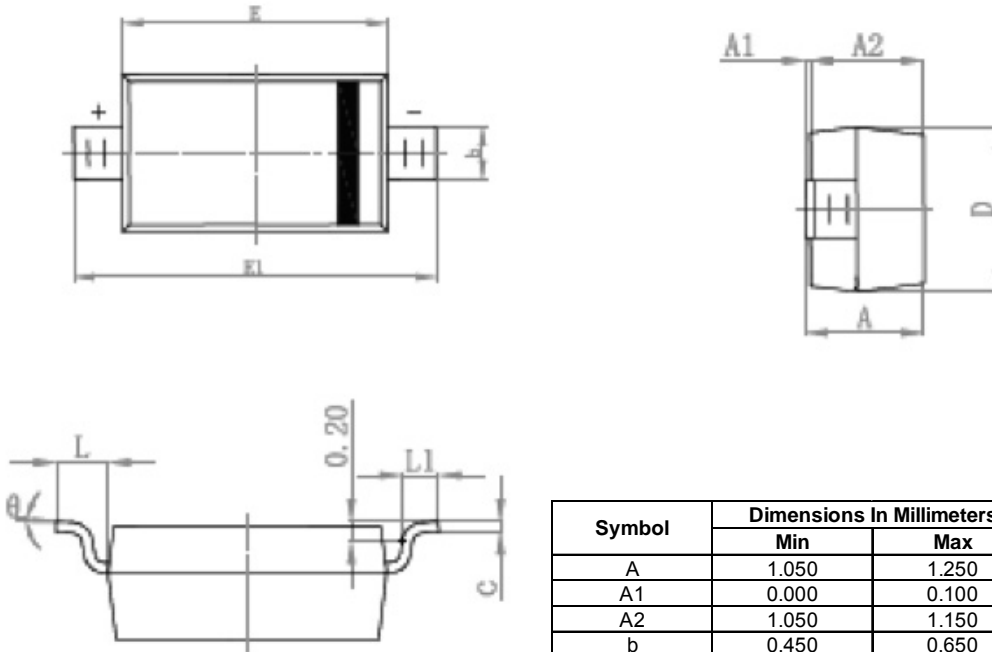
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage GSMBR0520 GSMBR0530 GSMBR0540 GSMBR0560 GSMBR0580	V_F	-	-	0.45 0.55 0.55 0.70 0.80	V	$I_F=500\text{mA}$
Reverse current GSMBR0520 GSMBR0530 GSMBR0540 GSMBR0560 GSMBR0580	I_R	-	-	80	μA	$V_R=20\text{V}$ $V_R=30\text{V}$ $V_R=40\text{V}$ $V_R=60\text{V}$ $V_R=80\text{V}$
Capacitance Between Terminals	C_T	-	30		pF	$V_R=4\text{V}$, $f=1\text{MHZ}$

Ratings and Characteristics Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)



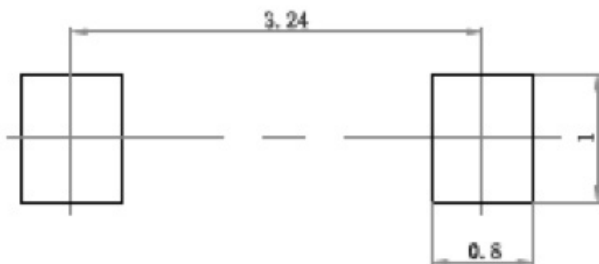
Package Outline Dimensions

SOD-123



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°

Suggested Pad Layout



Note:

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