

FEATURES

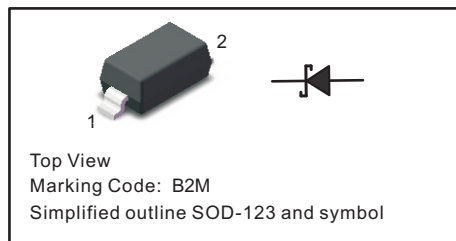
- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Negligible Reverse Recovery Time
- Low Capacitance

MECHANICAL DATA

- Case: SOD-123
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight:16mg 0.00056oz

PINNING

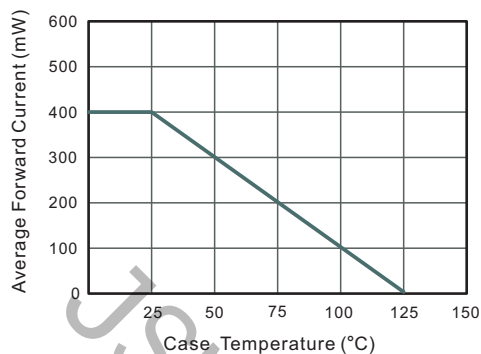
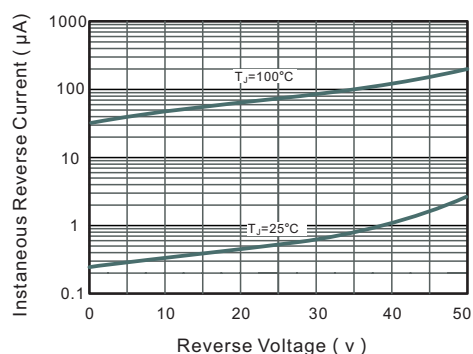
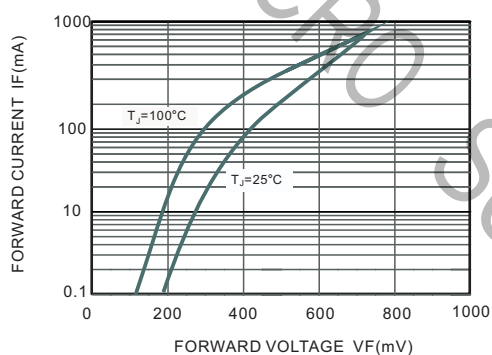
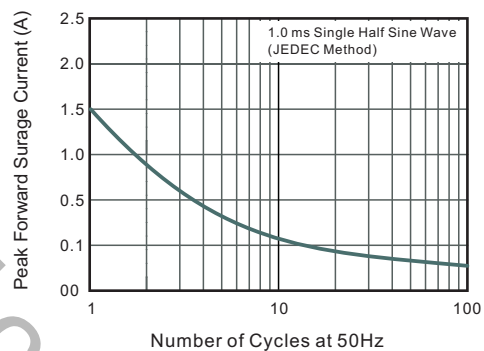
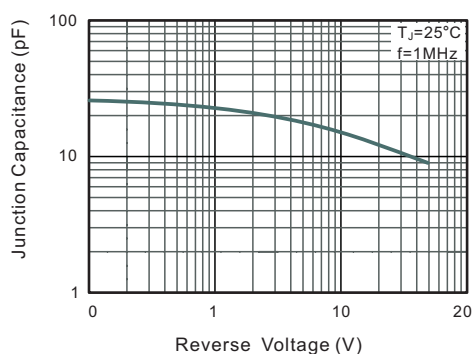
PIN	DESCRIPTION
1	Cathode
2	Anode



Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

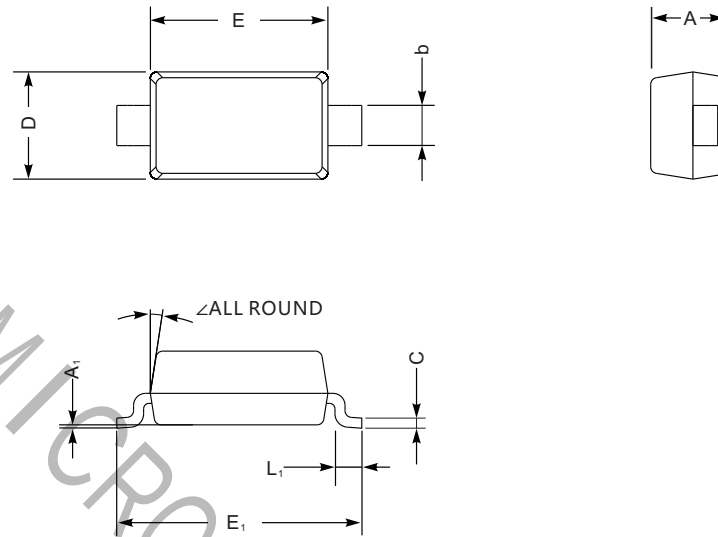
Parameter	Symbols	B0520LW	Units
Peak Repetitive Reverse Voltage	V_{RRM}	20	V
RMS reverse voltage	V_{RMS}	28	V
Working Peak Reverse Voltage	V_{DC}	20	V
Peak Forward Surge Current, 1.0s single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	1.5	A
Maximum Instantaneous Forward Voltage $I_F=20mA$ $I_F=200mA$	V_F	0.37	V
		0.60	
Power Dissipation	P_D	400	mW
Reverse current $V_R=30V$	I_R	5	uA
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	300	°C/W
Reverse voltage $I_R=100uA$	$V_{(BR)}$	40	V
Reverse recovery time $I_F=I_R=200mA, I_{rr}=0.1 \times I_R, R_L=100\Omega$	t_{rr}	10	ns
Forward Continuons Current	I_{FM}	380	mA
Total capacitance $V_R=0V, f=1MHz$	C_{tot}	28	pF
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-55 ~ +150	°C

Fig.1 Forward Current Derating Curve

Fig.2 Typical Reverse Characteristics

Fig.3 Forward Characteristics

Fig.4 Maximum Non-Repetitive Peak Forward Surge Current

Fig.5 Typical Junction Capacitance


PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



SOD-123 mechanical data

UNIT		A	C	D	E	E ₁	L ₁	b	A ₁	∠
mm	max	1.3	0.22	1.8	2.8	3.9	0.45	0.7	0.2	9°
	min	0.9	0.09	1.5	2.5	3.6	0.25	0.5	—	
mil	max	51	8.7	71	110	154	18	28	8	
	min	35	3.5	59	98	142	10	20	—	

The recommended mounting pad size

