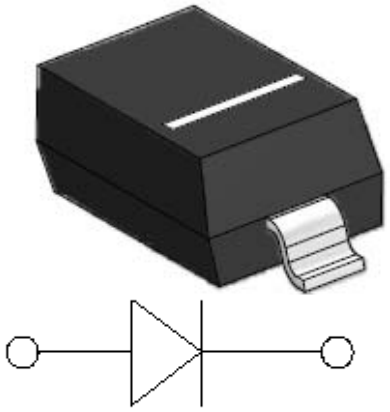
Small Signal Schottky Diode



Features

- V_R 20V
- I_{FAV} 0.5A

Mechanical Data

- **Package**: SOD-123
- **Terminals**: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** B2

■Maximum Ratings (Ta=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	V_{RRM}	V		20
Non-Repetitive Peak Forward Surge Current	I_{FSM}	A	t_p=8.3ms	5.5
Repetitive Peak Forward Current	I_{FRM}	A	tp=1ms，δ=0.25	2.5
Average forward current	I_{FAV}	A		0.5
Power dissipation	P_D	mW		350
Thermal Resistance from junction to ambient	$R_{\theta JA}$	℃/W		285
Junction temperature	T_j	℃		125
Storage temperature range	T_{stg}	℃		-55 to +150

■Electrical Characteristics（Ta=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Maximum Forward voltage	V_F	V	I_F=0.1A	0.33
		V	I_F=0.5A	0.39
Maximum Reverse current	I_R	uA	V_R=10V	75
		uA	V_R=20V	250
Minimum Breakdown voltage	V_R	V	I_R=0.25mA	20

■Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MBR0520L	F2	Approximate 0.009	3000	30000	120000	7” reel

■ Characteristics (Typical)

Fig 1：Typical Forward Characteristics

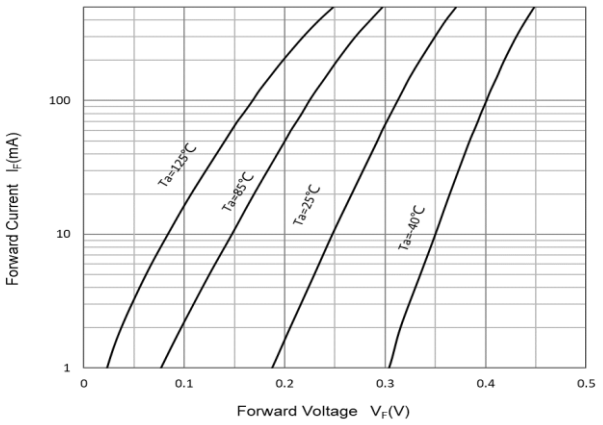


Fig 2：Typical Reverse Characteristics

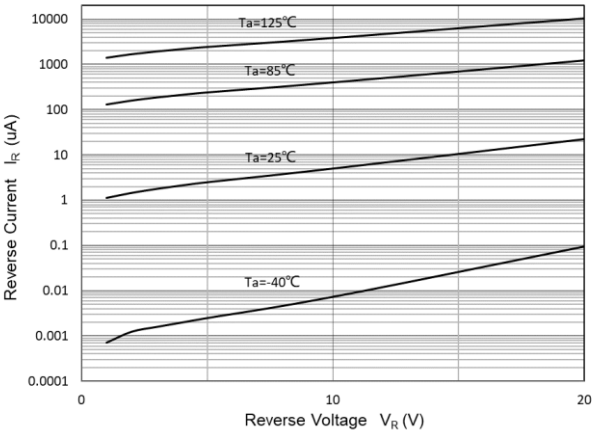
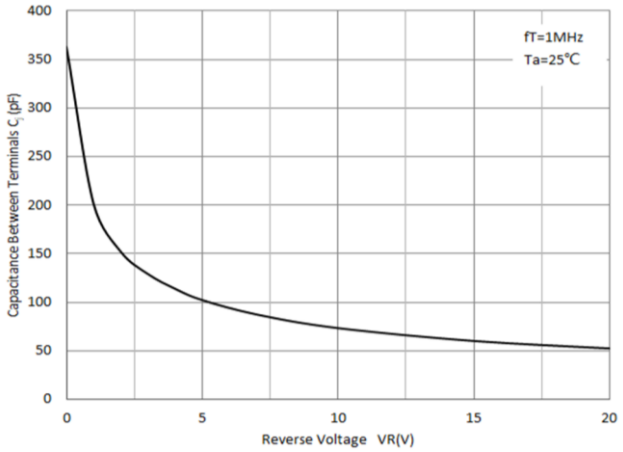
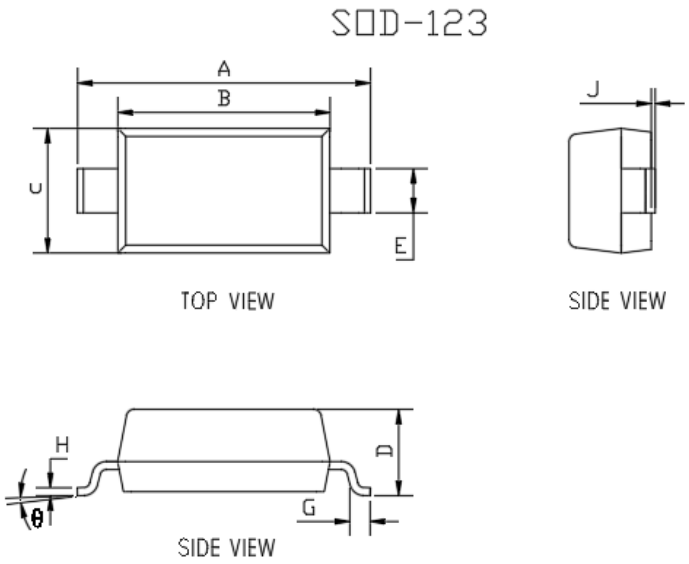


Fig 3：Capacitance Capability

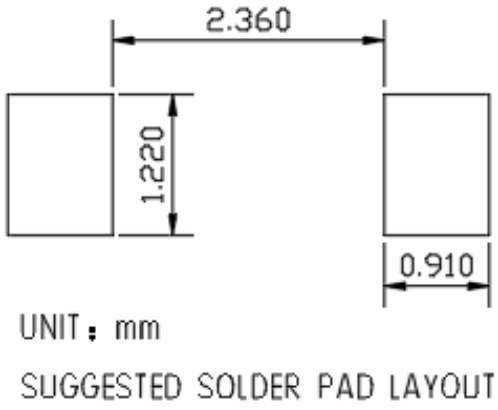


■ Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MN	MAX
A	0.140	0.152	3.550	3.850
B	0.100	0.112	2.550	2.850
C	0.055	0.071	1.400	1.800
D	0.037	0.053	0.950	1.350
E	0.020	0.028	0.510	0.710
G	0.006	0.018	0.150	0.450
H	0.003	0.010	0.080	0.250
J	0.000	0.006	0.000	0.150
θ	0	8°	0	8°

■ Soldering Footprint



Note:
1. All dimensions are in millimeters (mm) unless otherwise specified.
[所有尺寸均以毫米为单位，除非另有说明]
2. General tolerances: ±0.10mm unless otherwise specified.
[通用公差为±0.10mm，除非另有说明]
3. Dimensions and tolerances per ASME Y14.5M-2018.
[尺寸和公差遵循 ASME Y14.5M-2018 标准]
4.All dimensions shown are exclusive of burrs and gate residues.
Burrs and gate vestiges shall not exceed 0.15 mm in maximum.
[所有尺寸均不包括毛刺和浇口残留。毛刺与浇口残留的尺寸最大不得超过 0.15mm]
5.Dimension b does not include dambar protrusion of max 0.100 mm per side.
[尺寸b不包括单边最大0.100 MM的中筋凸出部分]
6.Dimensions B and C are the overall extreme outer dimensions of the mold compound. These dimensions exclude mold flash, lead flash, protrusions and burrs but include the maximum allowable mold mismatch.
[B和C是塑封体的外部极限尺寸，不包括包封溢料、内引线溢料、凸出部分以及胶体毛刺，但是包含了包封错位的最大尺寸]
7.Formed leads shall be planar with respect to one another within a maximum of 0.076 mm relative to the seating plane.
[成型的管脚应为同一平面，共面性最大为0.1mm]

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