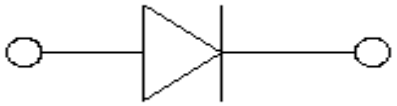
MBR0530L

Schottky Rectifier



Features

- V_R 30V
- I_F 0.5A
- Low Forward Voltage Drop
- Moisture Sensitivity Level 1

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:** SE

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

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
DC Blocking Voltage	V_R	V		30
Peak forward surge current	I_{FSM}	A	8.3ms, half sine	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_{tot}	mW		350
Thermal Resistance from junction to ambient(Note)	$R_{\theta JA}$	℃/W		286
Maximum junction temperature	T_j	℃		125
Storage temperature range	T_{stg}	℃		-55 to +125

Note：Device mounted on PCB

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

Item	Symbol	Unit	Conditions	Min	TYP	Max
Breakdown Voltage	V_R	V	I_R= 100uA	30	-	-
Reverse Leakage Current	I_R	uA	V_R=15V	-	-	20
			V_R=30V	-	-	130
Forward Voltage	V_F	V	I_F=0.1A	-	-	0.375
			I_F=0.5A	-	-	0.43
Capacitance	Cj	pF	V_R=0V, f=1MHz	-	180	-

■ Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MBR0530L	F2	Approximate 0.011	3000	30000	120000	7” reel

■ Characteristics (Typical)

Fig 1：Typical Forward Characteristics

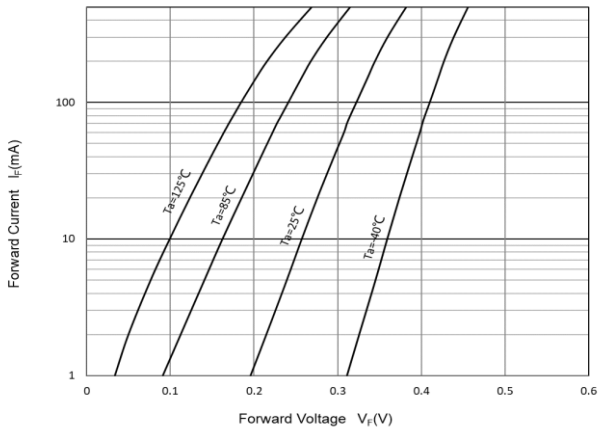


Fig 2：Typical Reverse Characteristics

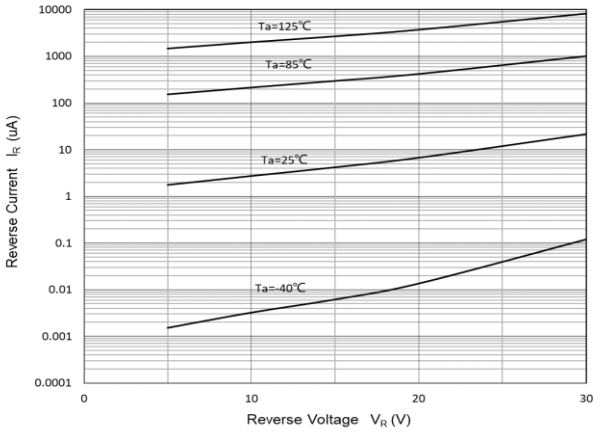
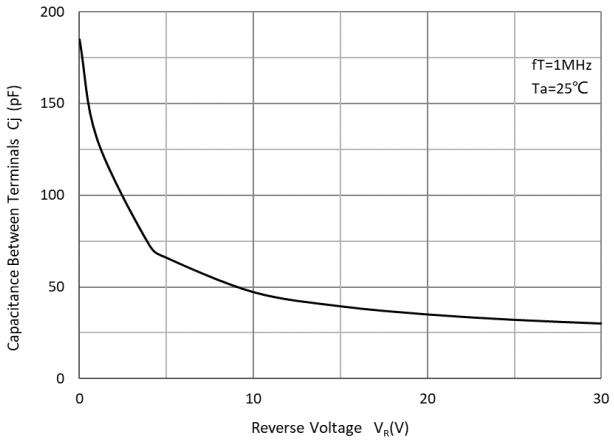
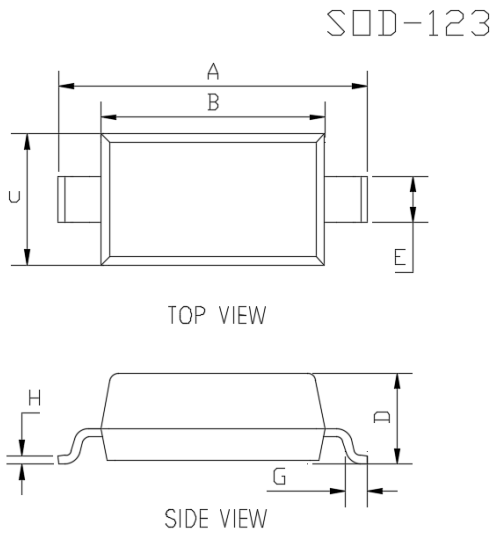


Fig 3：Capacitance Capability

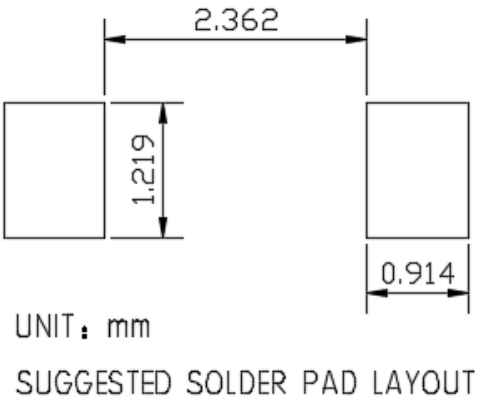


■ Outline Dimensions



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	---	0.150	---
H	---	0.010	---	0.250
J	---	0.006	---	0.150

■ 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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