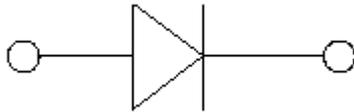


Small-Signal Schottky Barrier Diode



Features

- High reliability
- Fast Switching
- Low Forward Voltage Schottky Rectifier

Mechanical Data

- **Package:** SOD323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** L9

■ Maximum Ratings (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	V _{RRM}	V		30
Peak forward surge current	I _{FSM}	A	t _p < 1s	0.6
Repetitive Peak Forward Current	I _{FRM}	A	t _p =1ms, δ=0.25	0.3
Average forward current	I _{FAV}	mA		200
Power dissipation	P _{tot}	mW		200
Thermal Resistance, Junction to Ambient	R _{θJ-A}	°C/W		500
Maximum junction temperature	T _j	°C		-55 to +125
Storage temperature range	T _{stg}	°C		-55 to +150



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■ Electrical Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Maximum Forward voltage	V _F	V	I _F =0.1mA	0.24
			I _F =1mA	0.32
			I _F =10mA	0.40
			I _F =30mA	0.50
			I _F =100mA	1.00
Maximum Reverse current	I _R	μA	V _R =25V	2
Minimum Breakdown voltage	V _(BR)	V	I _R =10μA	30
Maximum Diode capacitance	C _D	pF	V _R =1V, f =1MHz	10
Maximum Reverse recovery time	t _{rr}	ns	I _F =I _R =10mA I _{RR} =1mA, R _L =100Ω	5

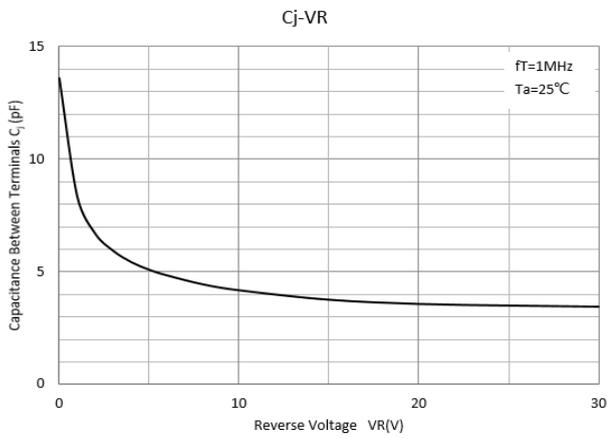
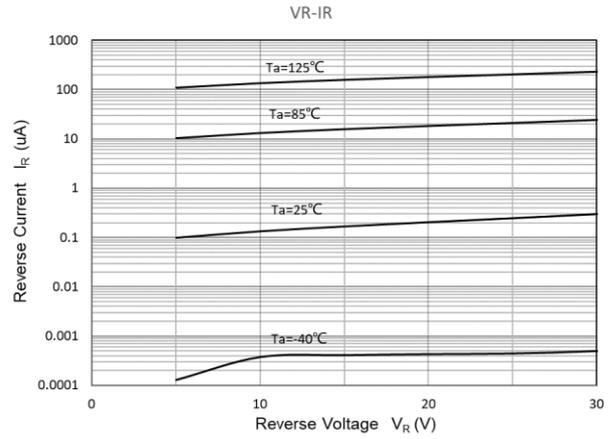
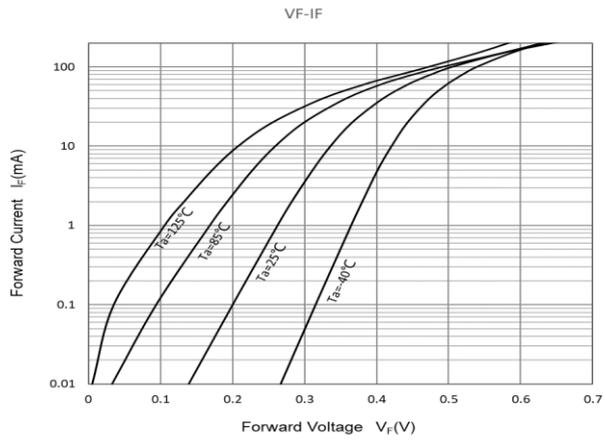
■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAT54WS	F2	Approximate 0.0048	3000	30000	120000	7" reel



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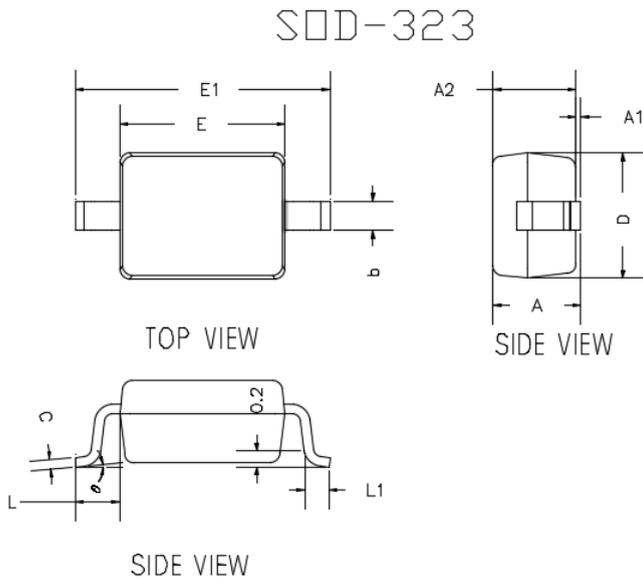
■ Characteristics (Typical)





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■Outline Dimensions

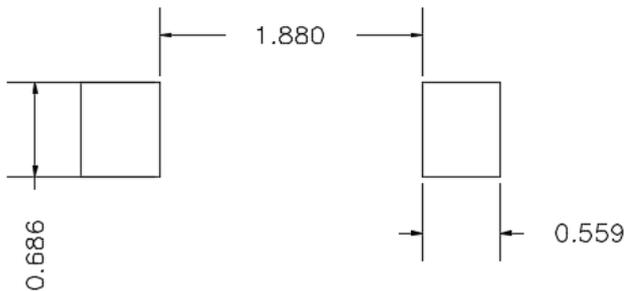


DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	---	0.0393	---	1.0000
A1	0.0000	0.0039	0.0000	0.1000
A2	0.0314	0.0354	0.8000	0.9000
b	0.0098	0.0157	0.2500	0.4000
c	0.0031	0.0059	0.0800	0.1500
D	0.0472	0.0551	1.2000	1.4000
E	0.0629	0.0709	1.6000	1.8000
E1	0.0984	0.1063	2.5000	2.7000
L	0.0187TYP		0.475TYP	
L1	0.0098	0.0157	0.250	0.400
e	0°	8°	0°	8°

Note:

- 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]
- General tolerances: $\pm 0.10\text{mm}$ unless otherwise specified.
[通用公差为 $\pm 0.10\text{mm}$, 除非另有说明]
- Dimensions and tolerances per ASME Y14.5M-2018.
[尺寸和公差遵循 ASME Y14.5M-2018 标准]
- All dimensions shown are exclusive of burrs and gate residues.
Burr 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]
- 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]
- Dimensions D and E 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.
[D和E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]
- 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]

■Soldering Footprint



UNIT : mm

SUGGESTED SOLDER PAD LAYOUT



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