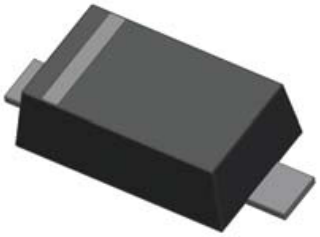
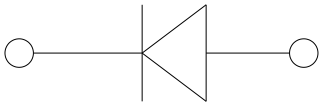
Schottky Barrier Diode





Features

- V_R 30V
- I_F 200mA

Typical Applications

- Low Forward Voltage Drop

Mechanical Data

- **Package**: SOD523
- **Terminals**: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** 5B

■Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	Limit Max
Power Dissipation	P_D	mW		200
Storage Temperature	T_{STG}	℃		-55 to +125
Junction Temperature	T_J	℃		125
DC Reverse Voltage	V_R	V		30
Average Rectified Forward Current	I_{FAV}	mA		200
Repetitive Peak Forward Current	I_{FRM}	A	tp=1ms，δ=0.25	0.3

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

Item	Symbol	Unit	Conditions	Min	Max
Breakdown Voltage	VR	V	IR= 100uA	30	
Reverse Leakage Current	IR	uA	VR=25V		2
Forward Voltage	VF	V	IF=0.1mA		0.24
			IF=1.0mA		0.32
			IF=10mA		0.40
			IF=30mA		0.50
			IF=100mA		1.00
Reverse Recovery Time	TRR	ns	IF=IR=10mA,RL=100Ω,IRR=1mA		5
Capacitance	C	pF	VR=1V, f=1MHZ		10

■Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAT54XV2	F2	Approximate 0.0025	8000	80000	320000	7” reel

■Characteristics(Typical)

Fig 1：P_D-Ta Curve

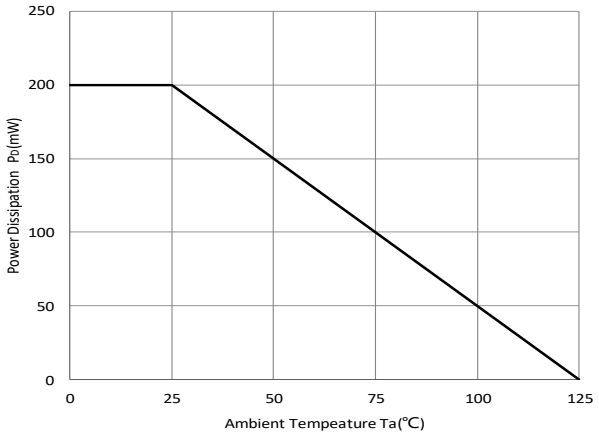


Fig 2：Capacitance Capability

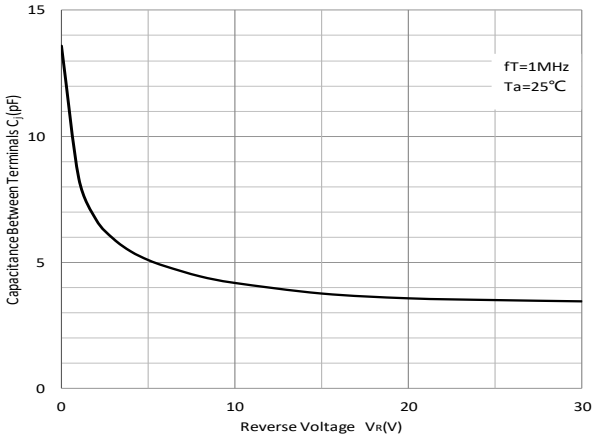


Fig 3：Typical Forward Characteristics

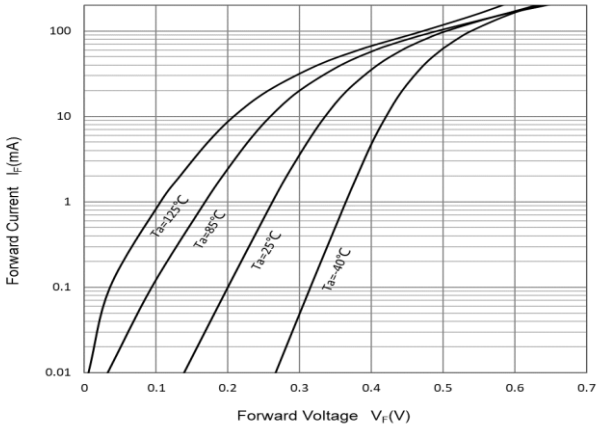
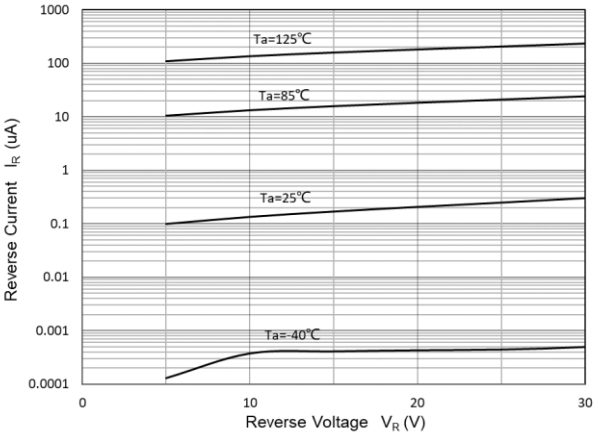
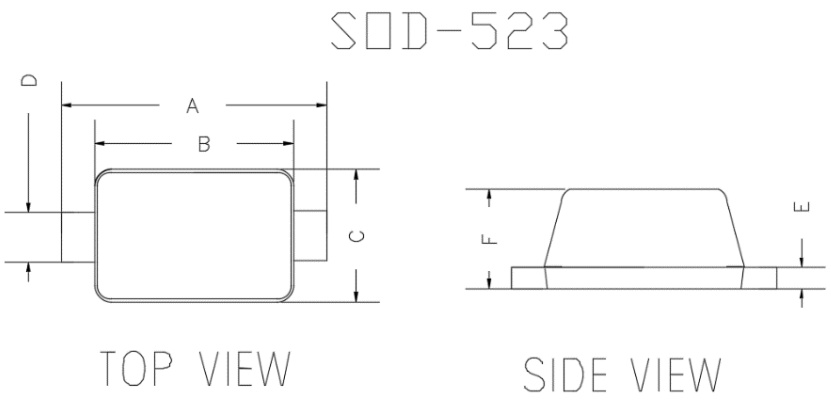


Fig 4：Typical Reverse Characteristics

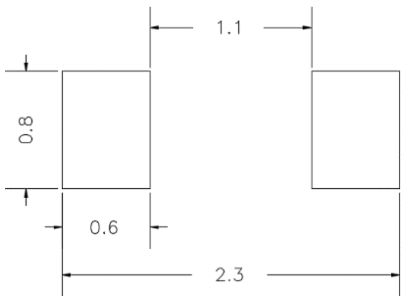


■ Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MN	MAX
A	0.059	0.067	1.500	1.700
B	0.043	0.051	1.100	1.300
C	0.028	0.035	0.700	0.900
D	0.010	0.014	0.250	0.350
E	0.002	0.008	0.050	0.200
F	0.020	0.028	0.500	0.700

■ 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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