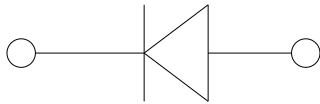
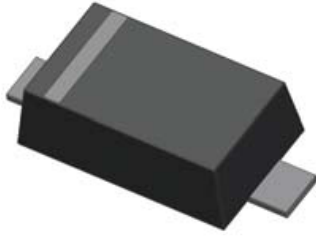


Schottky Barrier Diode



Features

- V_R 40V
- I_F 200mA

Typical Applications

- Low Forward Voltage Drop

Mechanical Data

- **Package:** SOD-523
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** 3B

■ Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	Limit Max
Power Dissipation	P_D	mW		150
Storage temperature range	T_{stg}	°C		-55 to +125
Junction Temperature	T_j	°C		125
Reverse Voltage	V_R	V		40
Average Forward Current	I_{FAV}	mA		200
Non-Repetitive Peak Forward Surge Current	I_{FSM}	A	8.3ms single half sine-wave	1.0
Repetitive Peak Forward Current	I_{FRM}	A	$t_p=1ms, \delta=0.25$	0.5

■ Electrical Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Conditions	Min	Max
Breakdown Voltage	V_R	V	$I_R=10\mu\text{A}$	40	
Forward Voltage	V_F	V	$I_F=100\text{mA}$		0.55
Reverse Leakage Current	I_R	μA	$V_R=10\text{V}$		1

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
RB520S-40	F2	Approximate 0.0025	8000	80000	320000	7" reel

■ Characteristics(Typical)

Fig 1: P_D-T_a Curve

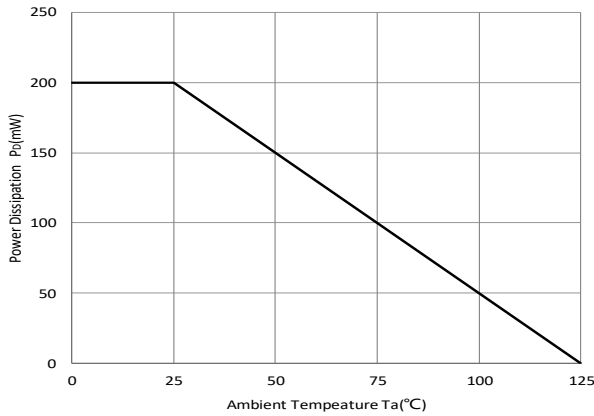


Fig 2: Capacitance Capability

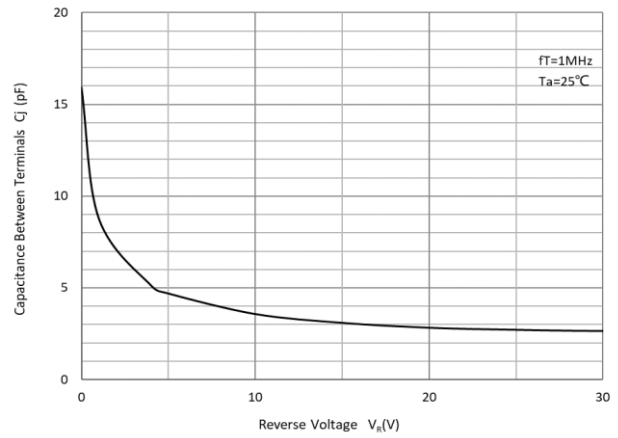


Fig 3: Typical Forward Characteristics

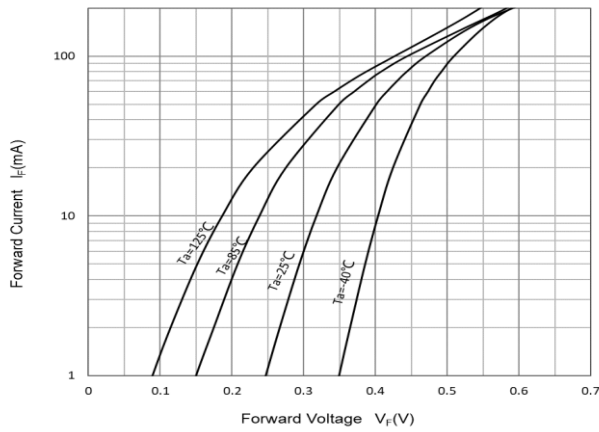
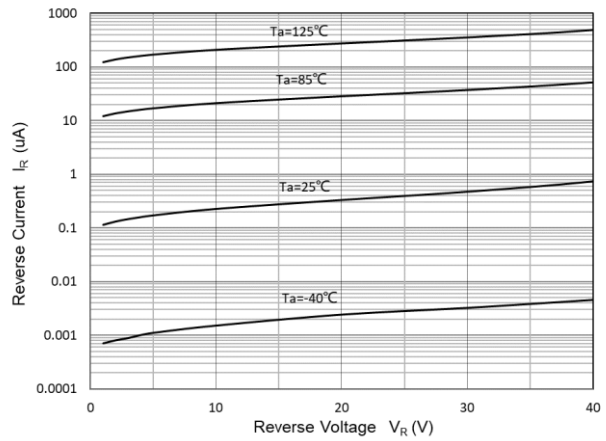
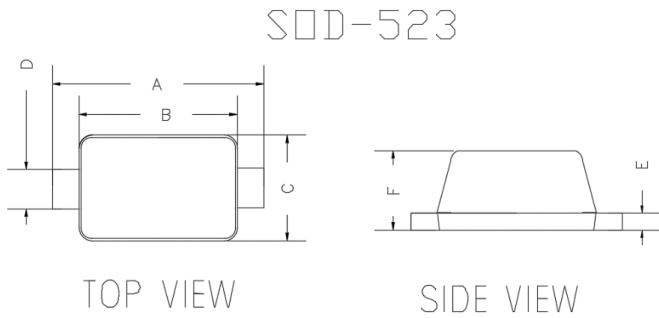


Fig 4: Typical Reverse Characteristics



■ Outline Dimensions

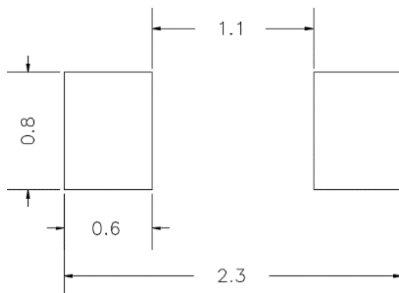


DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.059	0.067	1.500	1.700
B	0.043	0.051	1.100	1.300
C	0.028	0.035	0.700	0.900
D	0.010	0.014	0.250	0.350
E	0.002	0.008	0.050	0.200
F	0.020	0.028	0.500	0.700

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: $\pm 0.10\text{mm}$ unless otherwise specified.
[通用公差为 $\pm 0.10\text{mm}$ ，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.
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]
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]

■ Soldering Footprint



UNIT : mm

SUGGESTED SOLDER PAD LAYOUT



RB520S-40

Disclaimer

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