

RB520M-30

Silicon Epitaxial Planar Schottky Barrier Diode

Features

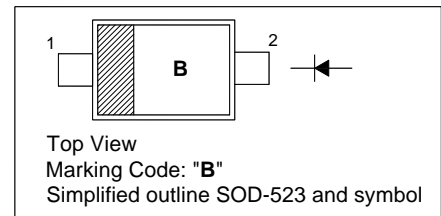
- High reliability
- Extremely small surface mounting type

Applications

- for low current rectification and high speed switching applications

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



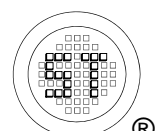
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	30	V
Average Forward Rectified Current ¹⁾	$I_{F(AV)}$	200	mA
Peak Forward Surge Current ($t = 8.3 \text{ ms}$)	I_{FSM}	1	A
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 40 to + 150	$^\circ\text{C}$

¹⁾ Device mounted on FR-4 substrate PC board, 2oz copper, with 1-inch square copper plate.

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 100 \text{ mA}$ at $I_F = 200 \text{ mA}$	V_F	0.51 0.58	V
Reverse Current at $V_R = 10 \text{ V}$	I_R	1	μA



Electrical Characteristic Curves

Fig 1. Peak Forward Surge Current vs. Time

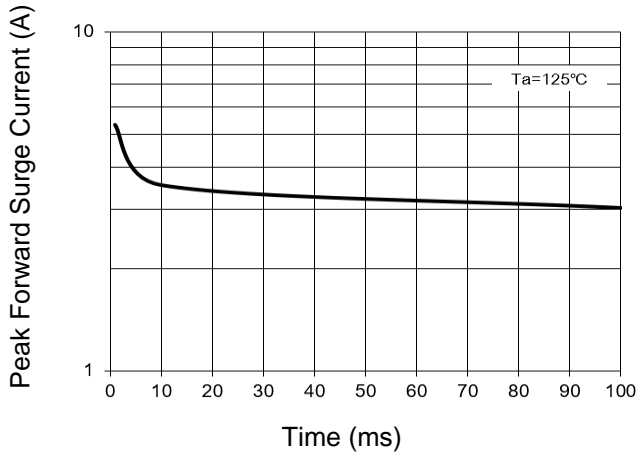


Fig 2. Capacitance Characteristic Curves

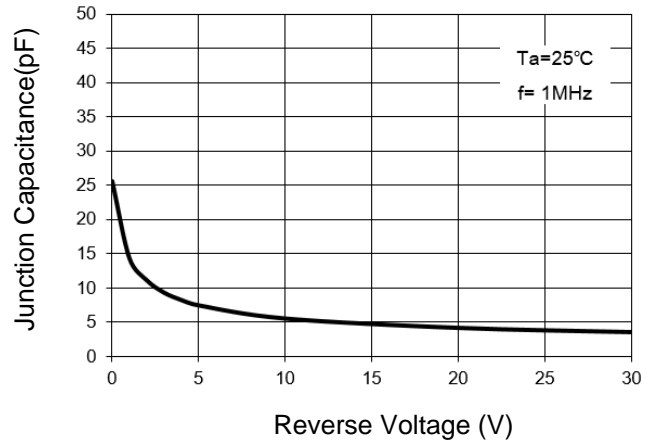


Fig 3. Reverse Characteristic Curve

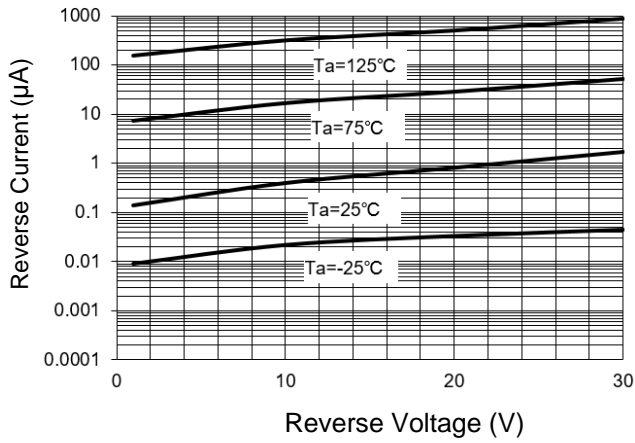


Fig 4. Forward Characteristic Curve

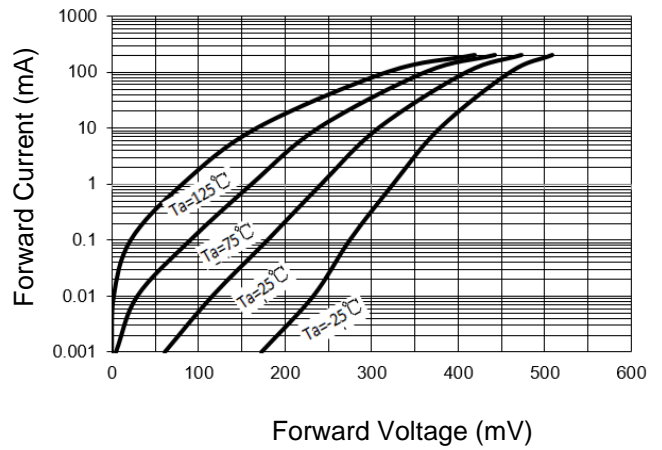
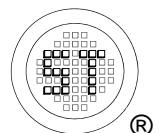
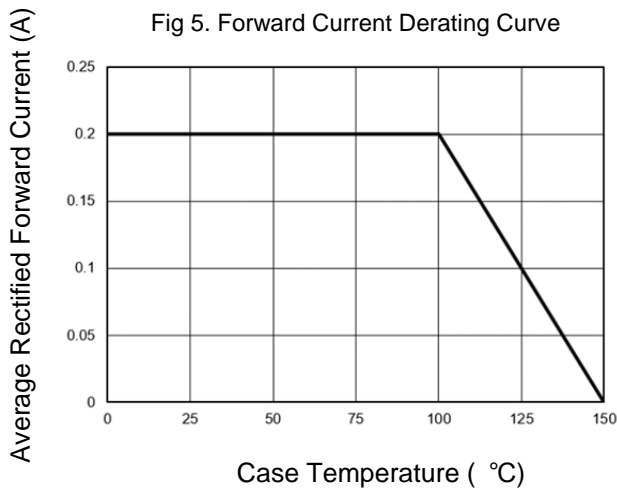


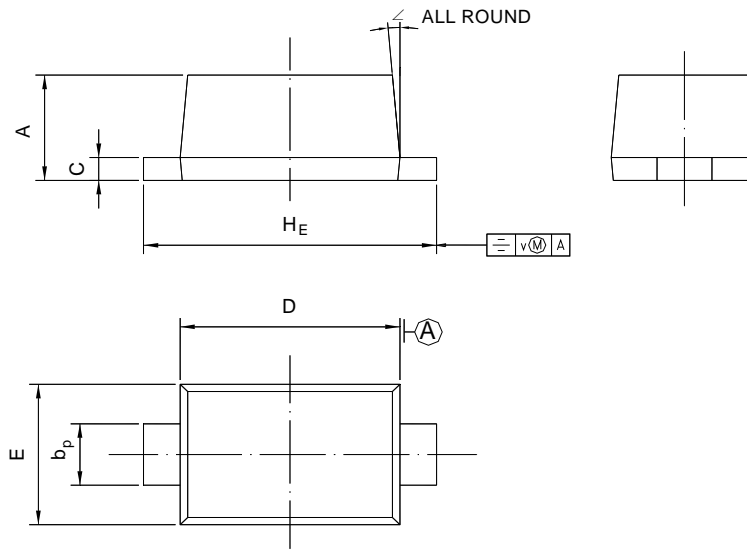
Fig 5. Forward Current Derating Curve



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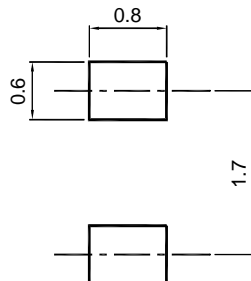
PACKAGE OUTLINE Plastic surface mounted package; 2 leads

SOD-523



UNIT	A	b _p	C	D	E	H _E	V	∠
mm	0.70 0.60	0.4 0.3	0.135 0.100	1.25 1.15	0.85 0.75	1.7 1.5	0.1	5°

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	(inch)	mm	(inch)	
SOD-523	8	4 ± 0.1	0.157 ± 0.004	178	7	4,000

Marking information

" B " = Part No.
" III " = Cathode line
Font type: Arial

