

RB520S-30

Silicon Epitaxial Planar Schottky Barrier Rectifier

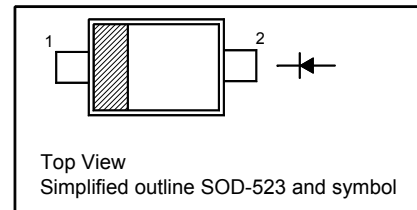
for low current rectification and high speed switching applications

Features

- High reliability
- Extremely small surface mounting type

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 Rectified Forward Current	$I_{F(AV)}$	200	mA
Peak Forward Surge Current ($t = 8.3 \text{ ms}$)	I_{FSM}	1	A
Power Dissipation	P_D	200	mW
Operating Junction Temperature Range	T_j	- 40 to + 125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 40 to + 125	$^\circ\text{C}$

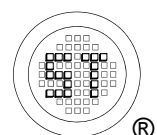
Thermal Characteristics

Parameter	Symbol	Max.	Unit
Thermal Resistance from Junction to Ambient ¹⁾	$R_{\theta JA}$	500	$^\circ\text{C/W}$

¹⁾ Device mounted on FR-4 substrate PC board, with minimum recommended pad layout.

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

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100 \mu\text{A}$	$V_{(BR)R}$	30	-	V
Forward Voltage at $I_F = 200 \text{ mA}$	V_F	-	0.6	V
Reverse Current at $V_R = 10 \text{ V}$	I_R	-	1	μA



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Electrical Characteristics Curves

Fig 1. Reverse Characteristic Curve

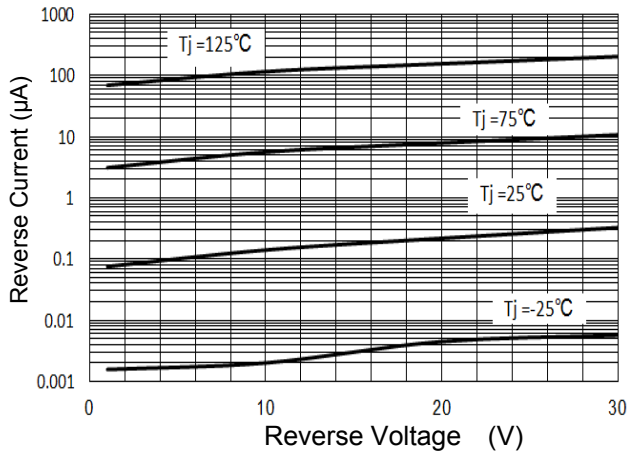


Fig 2. Forward Characteristic Curve

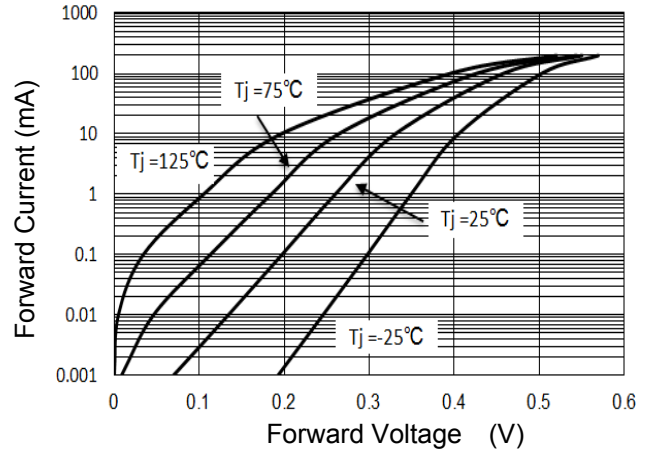


Fig 3. Junction Capacitance

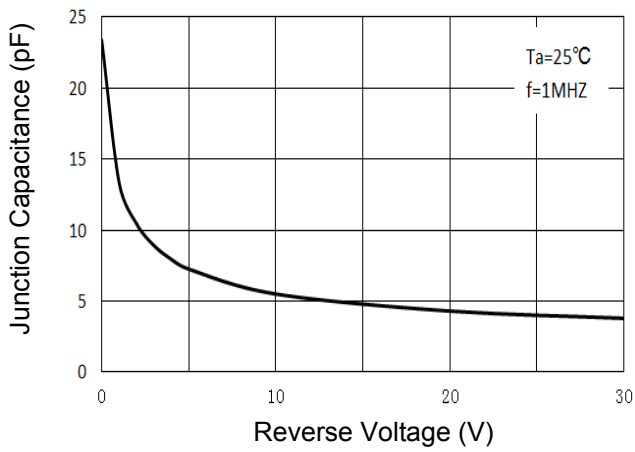
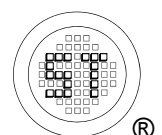
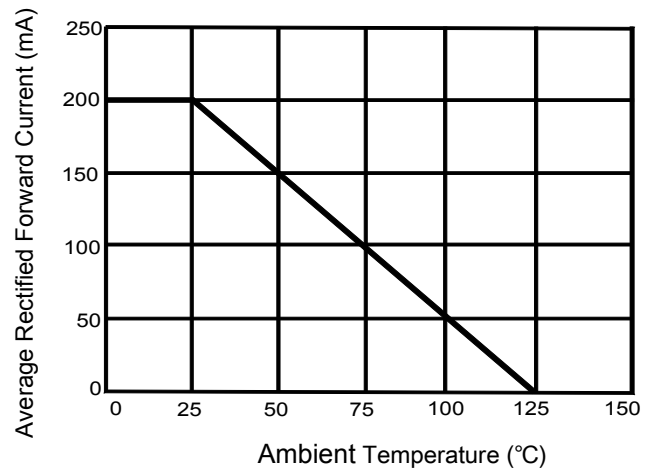


Fig 4. Average Rectified Current Derating

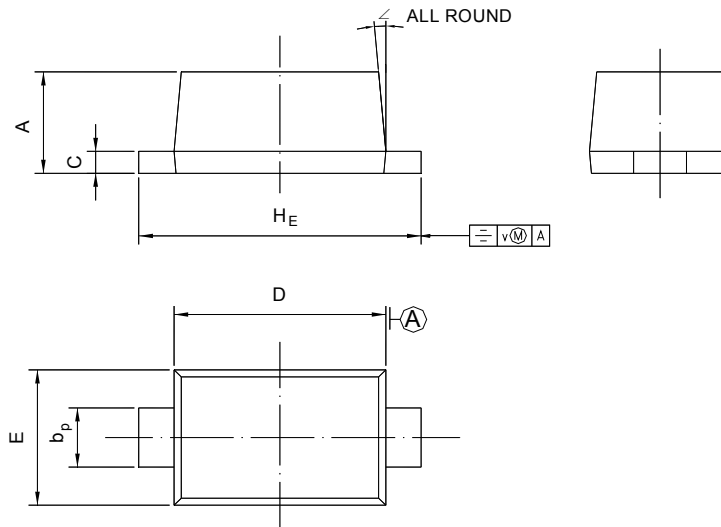


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PACKAGE OUTLINE

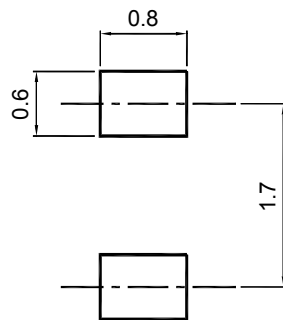
Plastic surface mounted package; 2 leads

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

