

RB521S-40

200mA Surface Mount Small Signal Schottky Diodes- 40V

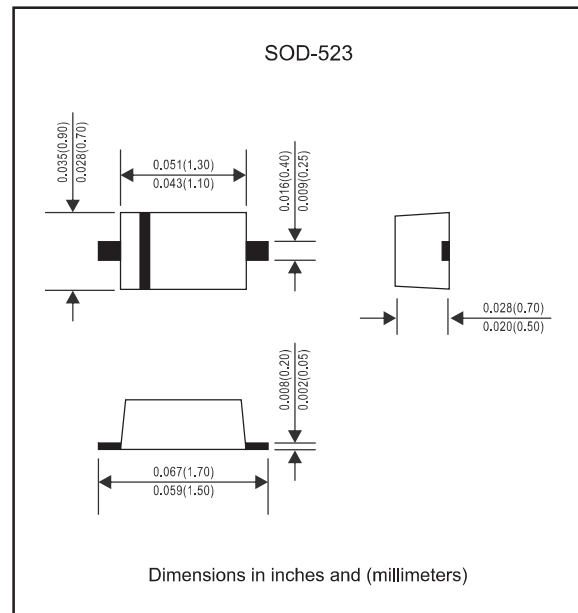
Features

- Low current rectification and high speed switching.
- Extremely small surface mount type.
- Up to 200mA current capability.
- Low forward voltage drop .
- Silicon epitaxial planar chip, metal silicon junction.
- Lead-free parts meet exceeds environmental standards of MIL-STD-19500 /228
- Compliant to Halogen-free

Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, SOD-523
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Mounting Position : Any

Package outline

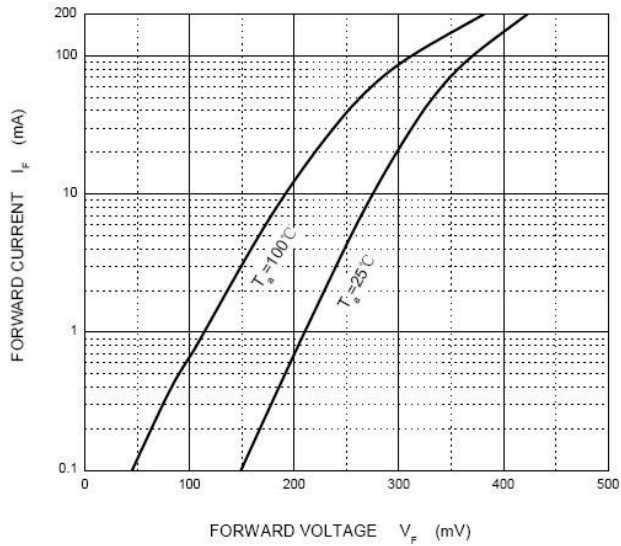


Maximum ratings and Electrical Characteristics (AT $T_A=25^\circ\text{C}$ unless otherwise noted)

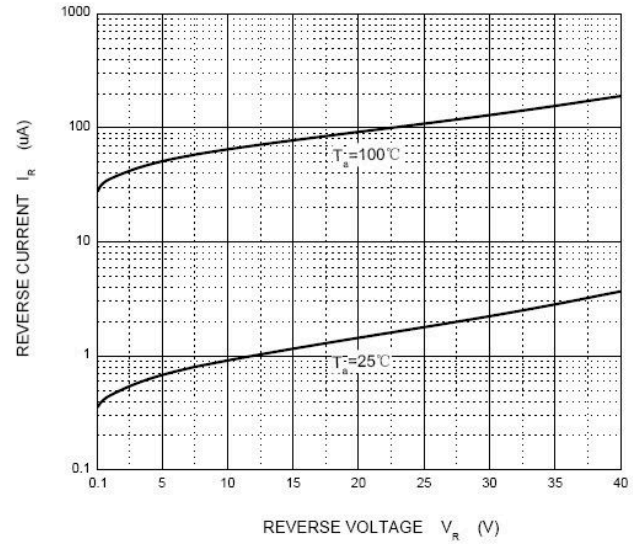
PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Repetitive peak reverse voltage		V_{RM}	40			V
Continuous reverse voltage		V_R	40			V
Mean rectifying current		I_O			200	mA
Forward surge current	60Hz for 1cycle	I_{FSM}			1000	mA
Operating junction temperature range		T_J	-55		+125	$^\circ\text{C}$
Storage temperature range		T_{STG}	-55		+125	$^\circ\text{C}$
Forward voltage	$I_F = 200 \text{ mA}$	V_F			0.54	V
Reverse current	$V_R = 10 \text{ V}$	I_R			20	μA
Diode capacitance	$V_R = 10 \text{ V}, f = 1\text{MHz}$	C_T		6.0		pF

RATING AND CHARACTERISTIC CURVES

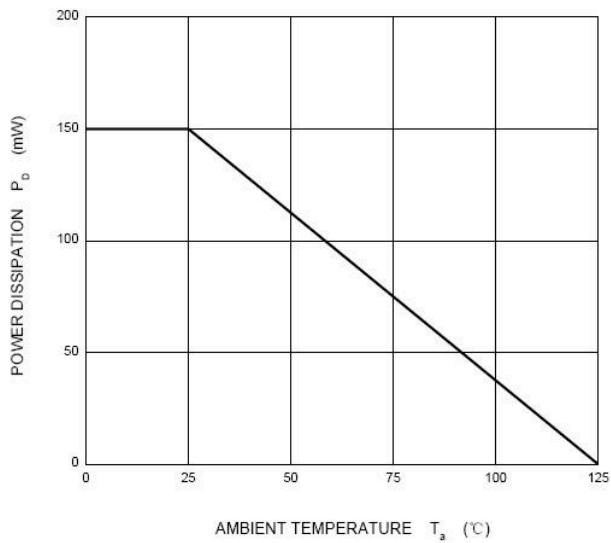
Forward Characteristics



Reverse Characteristics



Power Derating Curve



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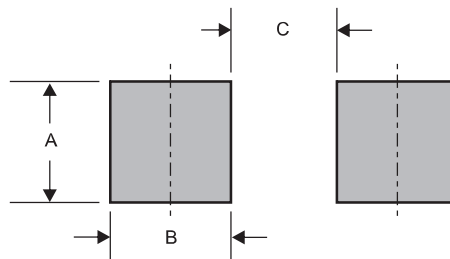
Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode	 A simplified rectangular outline of the diode package with two pins extending from the sides. The left pin is labeled '1' and the right pin is labeled '2'.	 The circuit symbol for a diode, consisting of a triangle pointing towards a vertical line. The left terminal is labeled '1' and the right terminal is labeled '2'.

Marking

Type number	Marking code
RB521S-40	S

Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SOD-523	0.032 (0.80)	0.024 (0.60)	0.044 (1.10)