

RB520S-40

200mA Surface Mount Small Signal Schottky Diodes- 40V

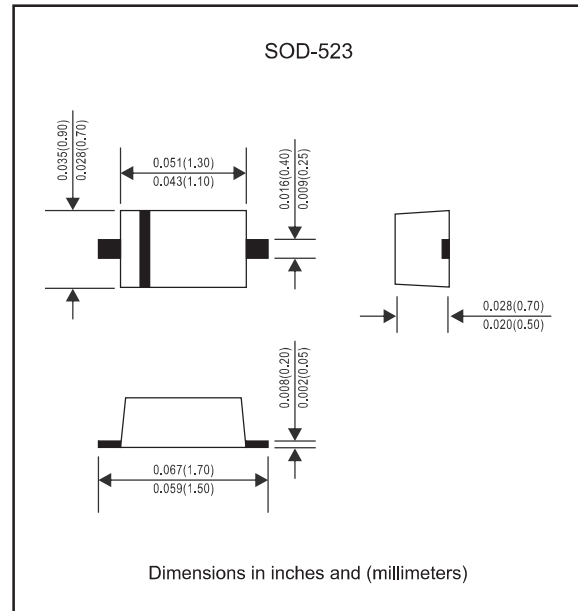
Features

- 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			0.60	V
Reverse current	$V_R = 10 \text{ V}$	I_R			1.0	μA
Diode capacitance	$V_R = 10 \text{ V}, f = 1\text{MHz}$	C_T		6.0		pF

RATING AND CHARACTERISTIC CURVES (RB520S-40)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

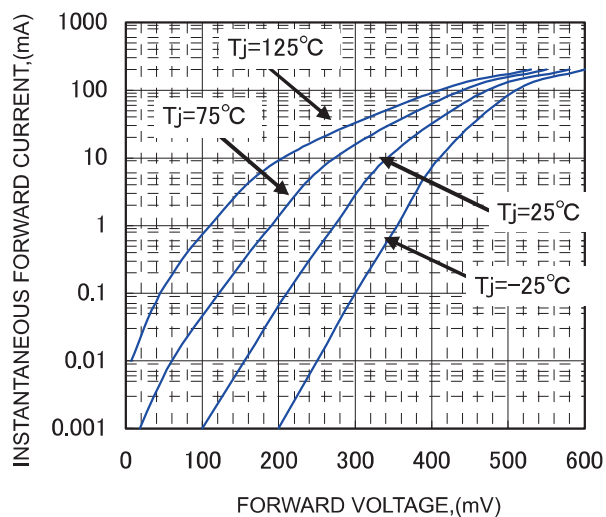


FIG.2 - TYPICAL REVERSE CHARACTERISTICS

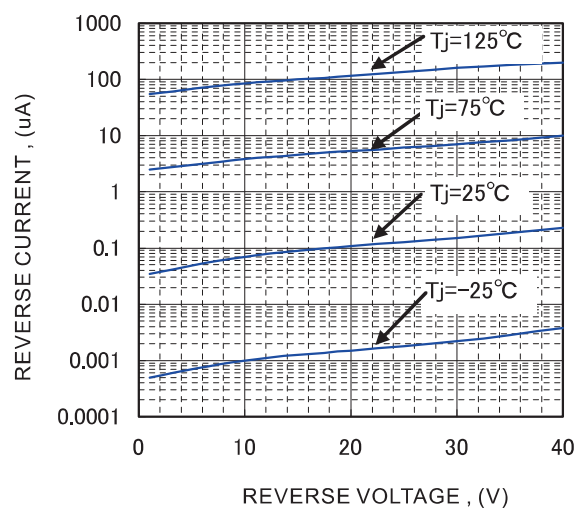
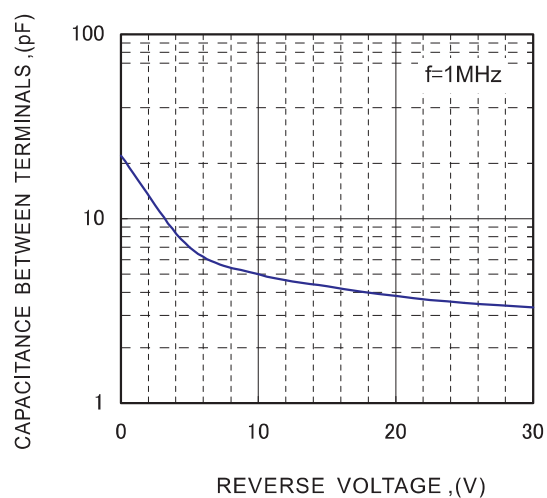


FIG.3-TYPICAL TERMINALS CAPACITANCE



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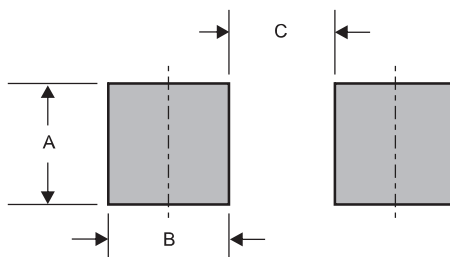
Pinning information

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

Marking

Type number	Marking code
RB520S-40	3B

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)