

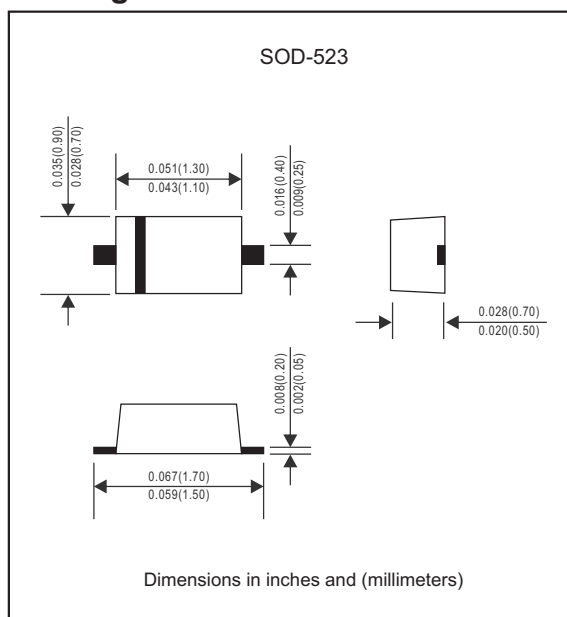
Features

- 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
- Suffix "-Q1" for AEC-Q101

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°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	°C
Storage temperature range		T _{STG}	-55		+125	°C
Forward voltage	I _F = 200 mA	V _F			0.60	V
Reverse current	V _R = 10 V	I _R			1.0	uA
Diode capacitance	V _R = 10 V, f = 1MHz	C _T		6.0		pF

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD
CHARACTERISTICS

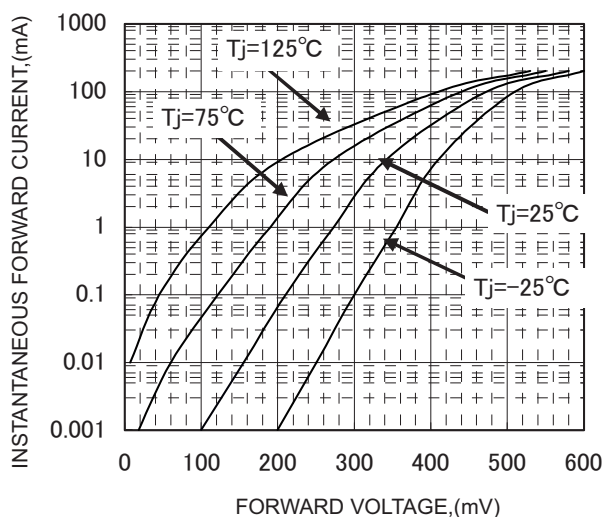


FIG.2 - TYPICAL REVERSE
CHARACTERISTICS

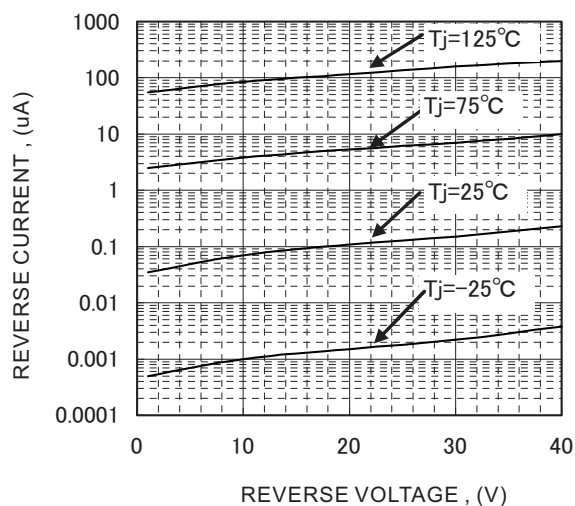
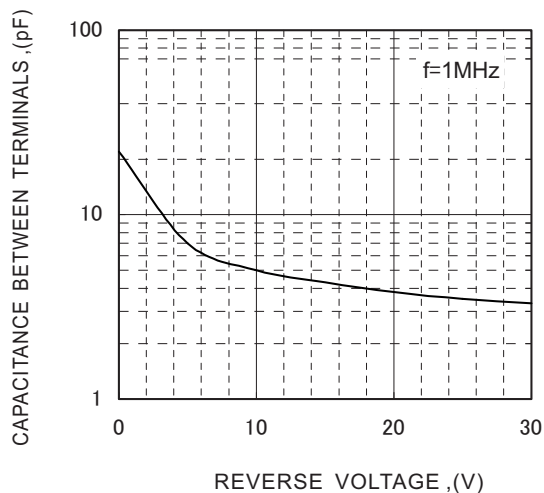


FIG.3-TYPICAL TERMINALS CAPACITANCE



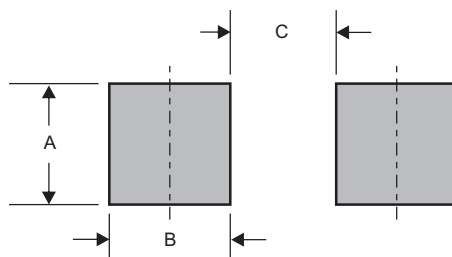
Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Marking

Type number	Marking code
RB520S-40-Q1	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)