

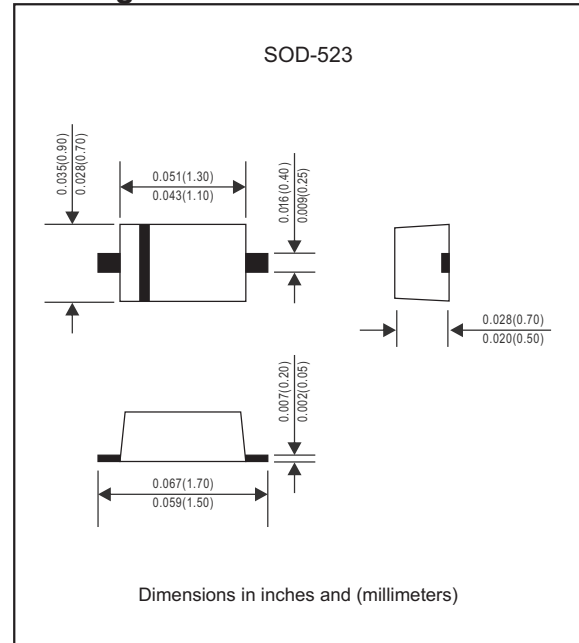
Features

- Low current rectification and extremely high speed switching.
- Extremely small surface mount type.
- Up to 30mA current capability.
- High Reliability.
- 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 $T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Repetitive peak reverse voltage		V_{RM}			40	V
Continuous reverse voltage		V_R			30	V
Average Rectifier Forward current		$I_{F(AV)}$			30	mA
Forward surge current	60Hz for 1cycle	I_{FSM}			200	mA
Capacitance between terminals	f=1MHz and applied 1.0V DC reverse voltage	C_T		2		pF
Operating junction temperature range		T_J	-65		+125	$^{\circ}\text{C}$
Storage temperature range		T_{STG}	-55		+125	$^{\circ}\text{C}$
Forward voltage	$I_F = 1.0 \text{ mA}$	V_F			0.37	V
Reverse current	$V_R = 30 \text{ V}$	I_R			0.5	μA

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CHARACTERISTICS

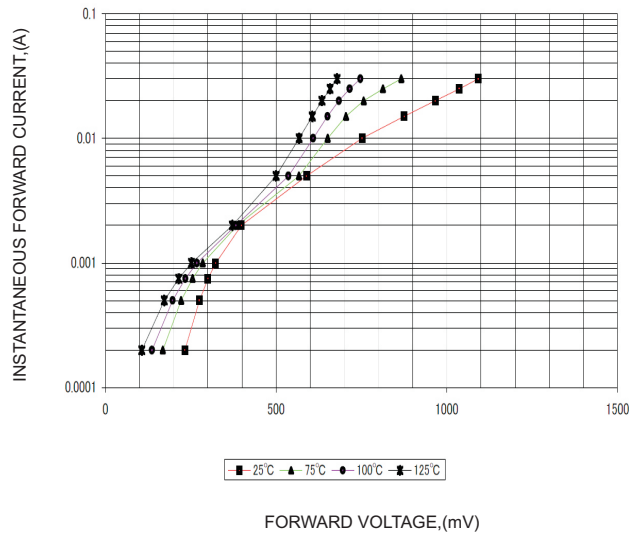


FIG.2 - TYPICAL REVERSE CHARACTERISTICS

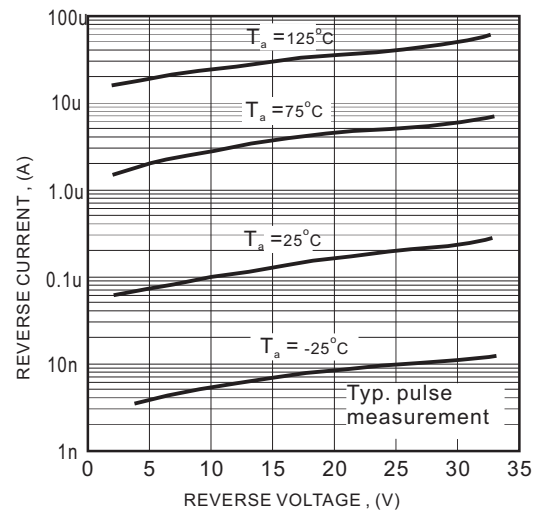
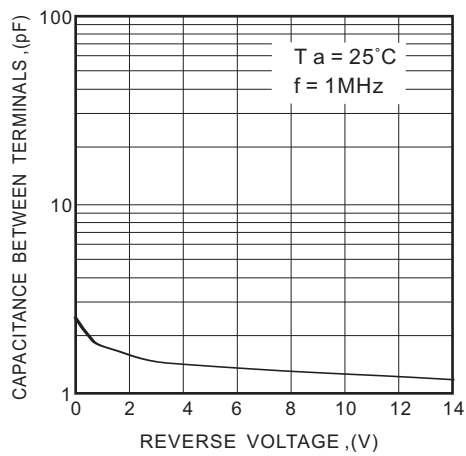


FIG.3-TYPICAL TERMINALS CAPACITANCE



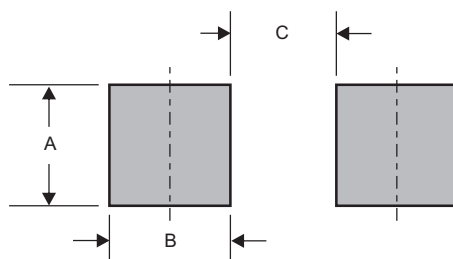
Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Marking

Type number	Marking code
RB751S-40-Q1	4B, 5

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)