

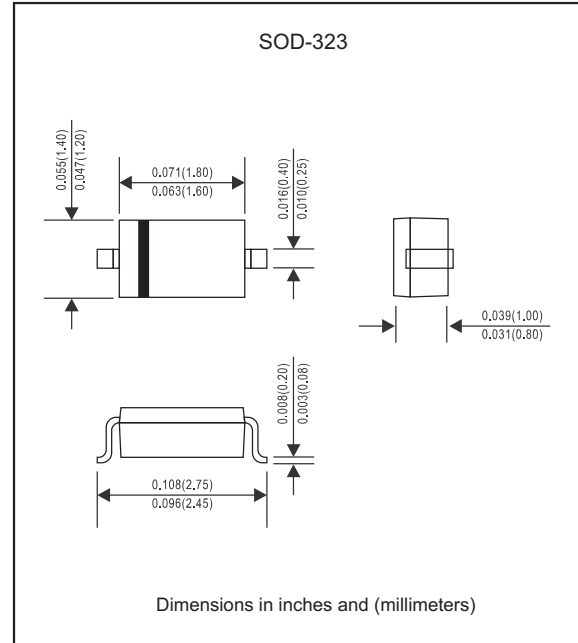
Features

- Low current rectification and high speed switching.
- Extremely small surface mount type.
- Up to 500mA 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-323
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Mounting Position : Any

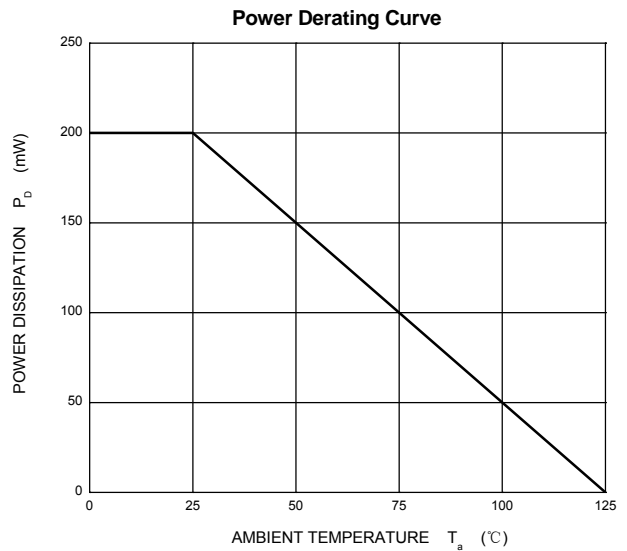
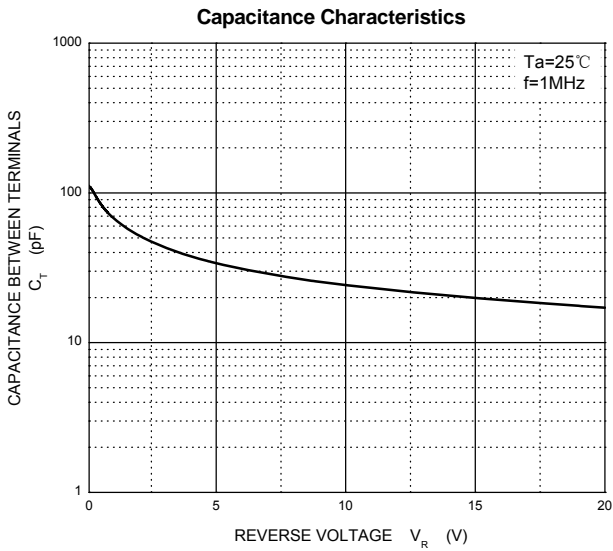
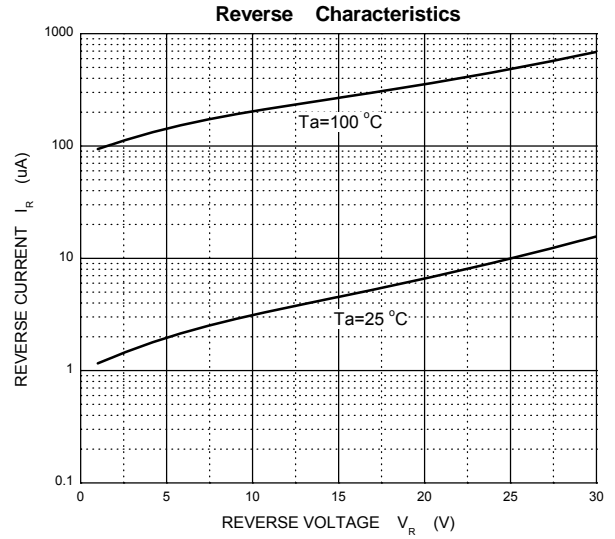
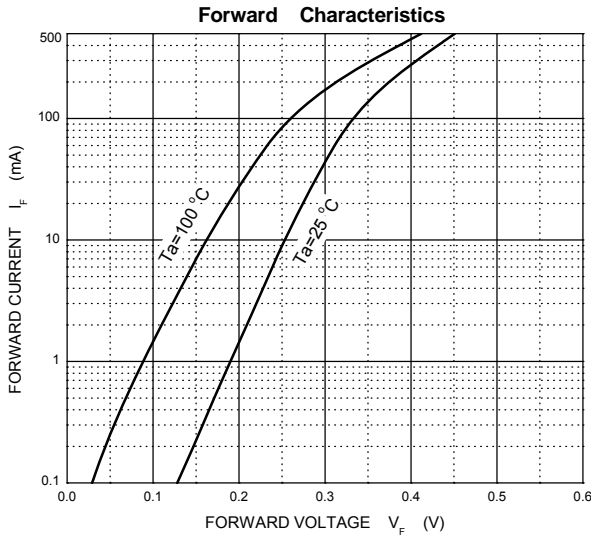
Package outline





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}			30	V
Continuous reverse voltage		V_R			20	V
Mean rectifying current		I_o			500	mA
Forward surge current		I_{FSM}			2000	mA
Operating junction temperature range		T_J	-55		+125	$^{\circ}\text{C}$
Storage temperature range		T_{STG}	-55		+125	$^{\circ}\text{C}$
Forward voltage	$I_F = 500 \text{ mA}$	V_F			0.54	V
Reverse current	$V_R = 20 \text{ V}$	I_R			100	μA

Typical Characteristics



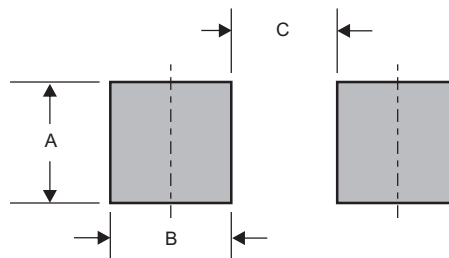
Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Marking

Type numbe	Marking code
RB551V-30-Q1	D/D4

Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SOD-323	0.032 (0.82)	0.022 (0.56)	0.069 (1.75)