

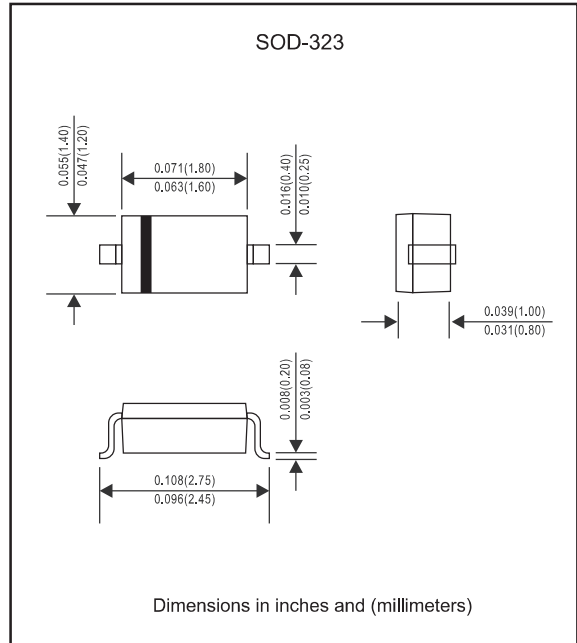
### Features

- Low Forward Voltage Drop
- Surface Device Type Mounting
- Lead-free parts for green partner, exceeds environmental standards of MIL-STD-19500 /228
- Compliant to Halogen-free
- Suffix "-Q1" for AEC-Q101

### Mechanical data

- Epoxy:UL94-VO 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 (AT $T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	Value	UNIT
Power Dissipation		$P_D$	200	mW
Repetitive Peak Reverse Voltage		$V_{RRM}$	40	V
Reverse Voltage		$V_R$	30	V
Forward Current		$I_F$	30	mA
Non-Repetitive Peak Forward Current	60Hz for 1cycle	$I_{FSM}$	200	mA
Operating Junction Temperature		$T_J$	+125	$^{\circ}\text{C}$
Storage Temperature Range		$T_{STG}$	-55~+125	$^{\circ}\text{C}$

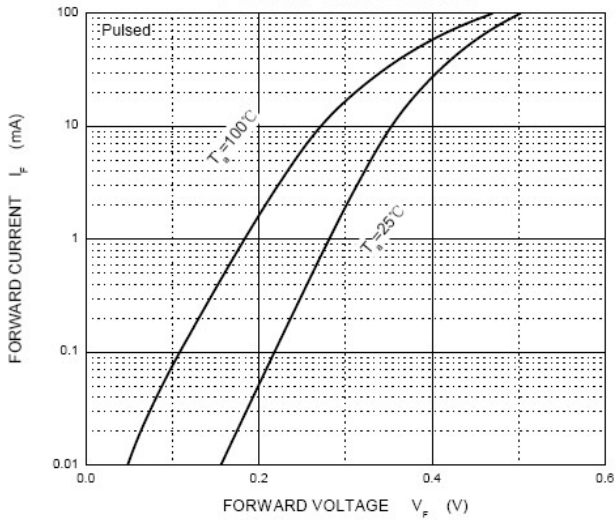
These ratings are limiting values above which the serviceability of the diode may be impaired.

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

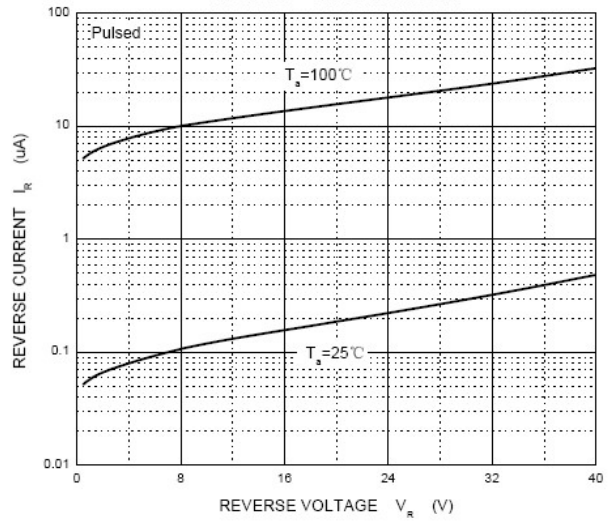
PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Breakdown Voltage	$I_R = 10\mu\text{A}$	$V_{BR}$	30			V
Forward voltage	$I_F = 1.0 \text{ mA}$	$V_F$			0.37	V
Reverse current	$V_R = 30 \text{ V}$	$I_R$			0.5	$\mu\text{A}$
Diode capacitance	$V_R = 10 \text{ V}, f = 1 \text{ MHz}$	$C_T$		6.0		pF

## Rating and characteristic curves

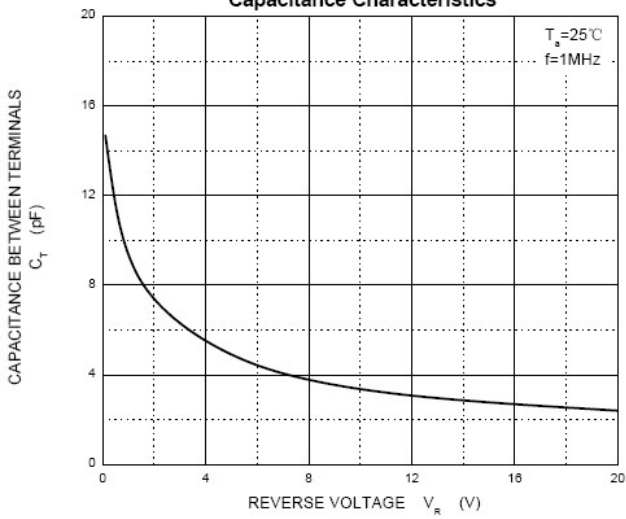
**Forward Characteristics**



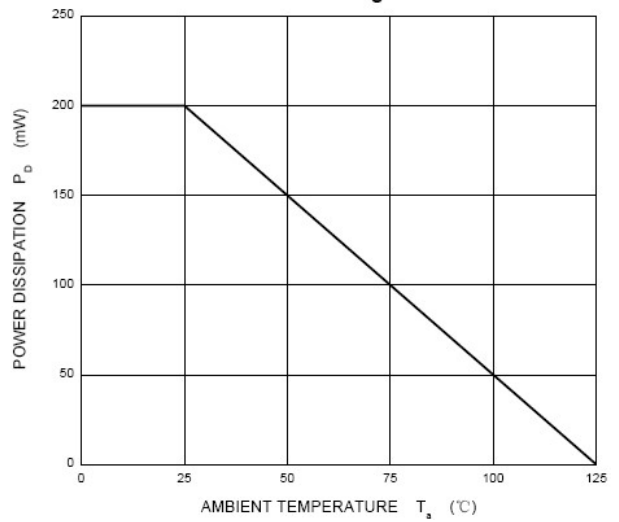
**Reverse Characteristics**





**Capacitance Characteristics**



**Power Derating Curve**



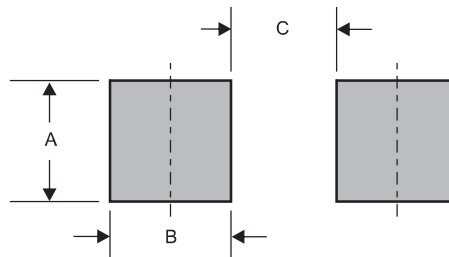
### Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

### Marking

Type number	Marking code
RB751V-40-Q1	5

### 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)