

■ Features

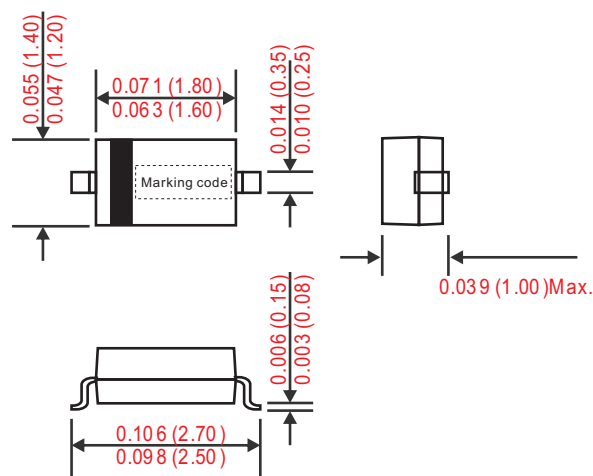
- Low forward voltage and low reverse current.
- Extremely high switching speed.
- High reliability.
- Low forward voltage drop .
- Schottky barrier diodes encapsulated in a SOD-323 package.
- Suffix "G" indicates Halogen-free part, ex. RB500VG.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

■ 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
- Weight : 0.0002 ounce, 0.005 gram

■ Outline

SOD-323



Dimensions in inches and (millimeters)

■ Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbol	RB500V	UNIT			
Marking code		JV				
DC reverse voltage	V_R	40	V			
Average rectifier forward current	I_O	100	mA			
Peak forward surge current	I_{FSM}	1000				
Operation junction temperature range	T_J	125	°C			
Storage temperature range	T_{STG}	-40 ~ +125				

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Reverse breakdown voltage	$I_R = 100\mu A$	$V_{(BR)R}$	40			V
Forward voltage	$I_F = 10mA$	V_F			450	mV
Reverse leakage	$V_R = 10V$	I_R			1.0	μA
Typical junction capacitance	$V_R = 10V, f = 1MHz$	C_J			20	pF

■ Rating and characteristic curves

Fig. 1 Forward characteristics

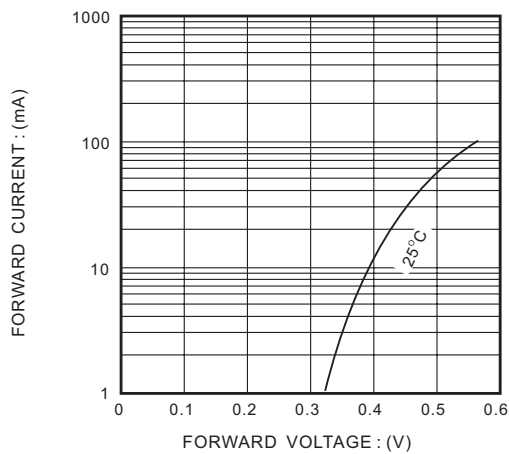


Fig. 2 Reverse characteristics

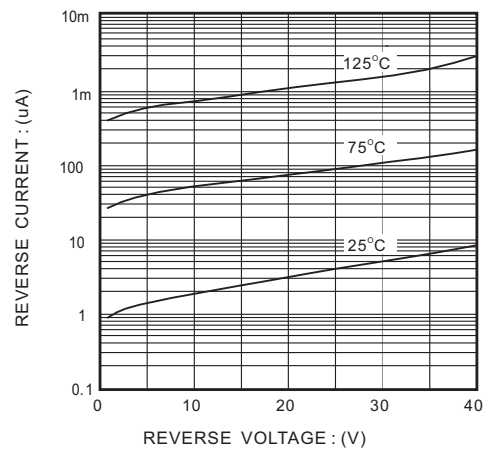


FIG.3-TYPICAL TERMINALS CAPACITANCE

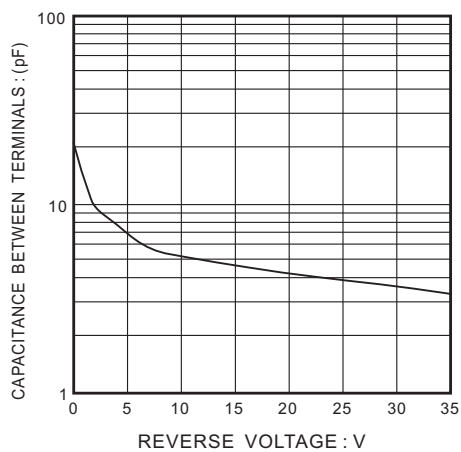
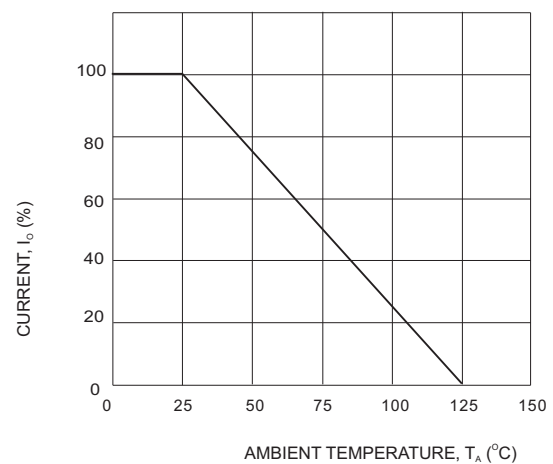
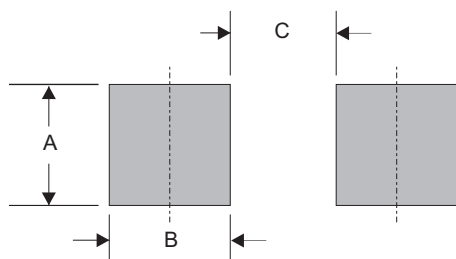


FIG.4-DERATING CURVE



■ SOD-323 foot print



A	B	C
0.059 (1.50)	0.039 (1.00)	0.051 (1.30)

Dimensions in inches and (millimeters)

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