RB520G

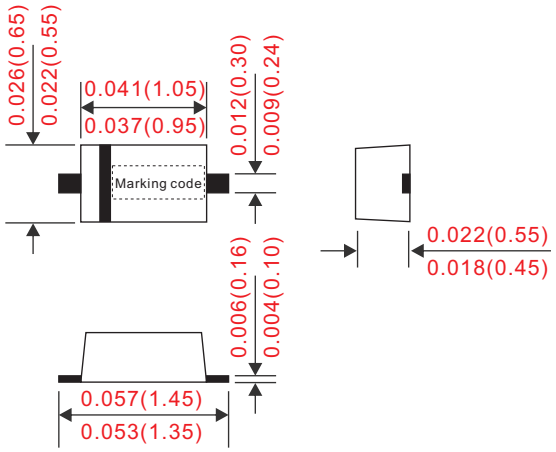
100mA Surface Mount Small Signal Diodes

■ Features

- Low current rectification and high speed switching.
- Extremely small surface mount type.
- Up to 100mA current capability.
- Silicon epitaxial planar chip, metal silicon junction.
- Suffix "G" indicates Halogen-free part, ex.RB520GG.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

■ Outline

SOD-723



Dimensions in inches and (millimeters)

■ Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, SOD-723
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Weight : Approximated 0.00077 gram

■ 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	RB520G	UNIT
Marking code		E	
Maximum Recurrent Peak Reverse Voltage	V_{RM}	30	V
Continuous reverse voltage	V_R	30	
Maximum Instantaneous Forward Voltage@10mA DC	V_F	0.45	V
Power Dissipation	P_D	150	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	520	°C/W
Operating Temperature	T_J	-40 ~ +125	°C
Storage temperature	T_{STG}	-40 ~ +125	°C

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Mean rectifying current		I_O			100	mA
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}			500	mA
Reverse current	V_R = 10V DC	I_R			0.5	uA

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■ Rating and characteristic curves

FIG.1-TYPICAL FORWARD CHARACTERISTICS

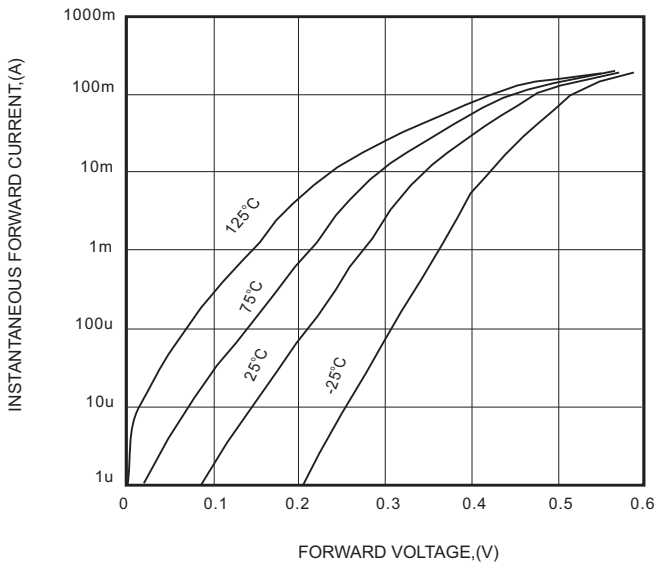


FIG.2 - TYPICAL REVERSE CHARACTERISTICS

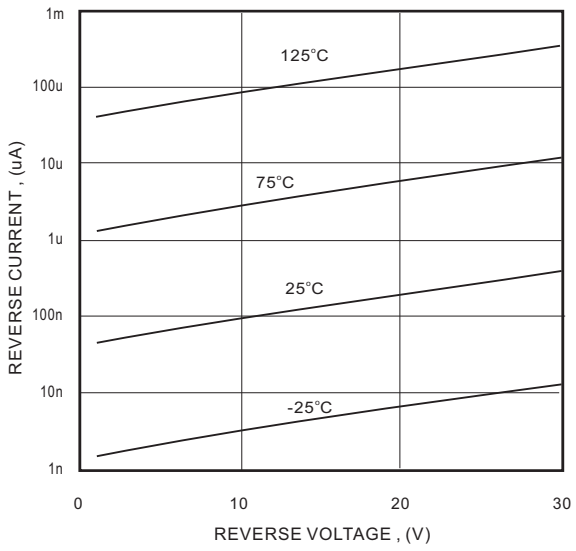
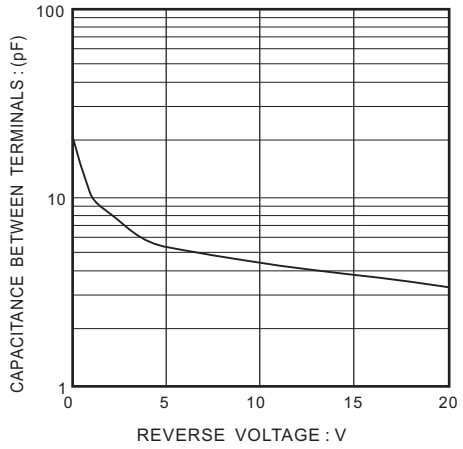
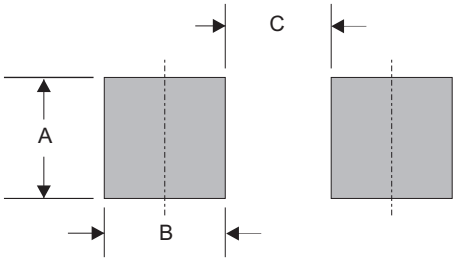


FIG.3-TYPICAL TERMINALS CAPACITANCE



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■ SOD-723 foot print



A	B	C
0.018 (0.45)	0.020 (0.50)	0.035 (0.90)

Dimensions in inches and (millimeters)

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