

# 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

#### ■ Mechanical data

• Epoxy:UL94-V0 rated flame retardant

· Case: Molded plastic, SOD-723

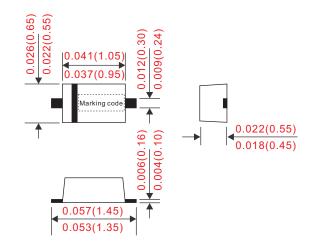
 Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

• Polarity : Indicated by cathode band

• Weight : Approximated 0.00077 gram

#### Outline

SOD-723



Dimensions in inches and (millimeters)

## ■ Maximum ratings and electrical characteristics

Rating at  $25^{\circ}$ 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	LINUT
Marking code		E	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RM</sub>	30	V
Continuous reverse voltage	V <sub>R</sub>	30	V
Maximum Instantaneous Forward Voltage@10mA DC	V <sub>F</sub>	0.45	V
Power Dissipation	P <sub>D</sub>	150	mW
Thermal resistance junction to ambient	R <sub>eJA</sub>	520	°C/W
Operating Temperature	T <sub>J</sub>	-40 ~ +125	°C
Storage temperature	T <sub>STG</sub>	-40 ~ +125	°C

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Mean rectifying current		I <sub>o</sub>			100	mA
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I <sub>FSM</sub>			500	mA
Reverse current	$V_R = 10V DC$	I <sub>R</sub>			0.5	uA

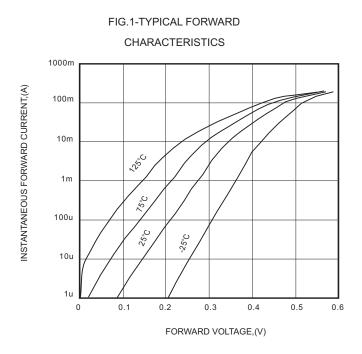
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## 100mA Surface Mount Small Signal Diodes

## ■ Rating and characteristic curves



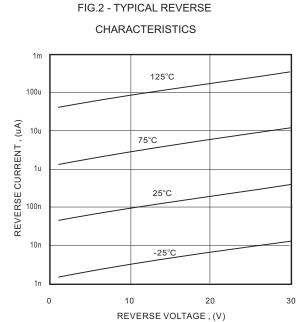
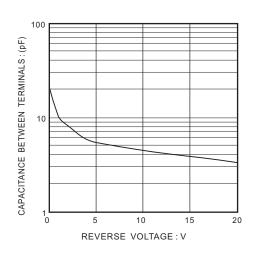


FIG.3-TYPICAL TERMINALS CAPACITANCE



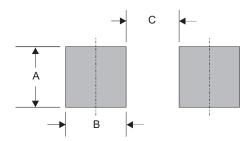
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## 100mA Surface Mount Small Signal Diodes

## ■ SOD-723 foot print



А	В	С
0.018 (0.45	0.020 (0.50)	0.035 (0.90)

Dimensions in inches and (millimeters)

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