RB751S

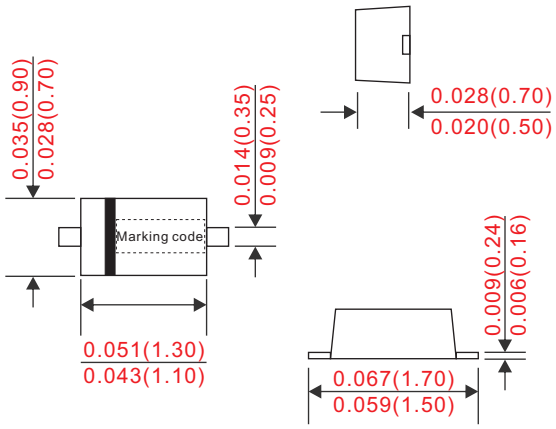
30mA Surface Mount Small Signal Diodes

■ Features

- Low current rectification and high speed switching.
- Extremely small surface mount type.
- Silicon epitaxial planar chip, metal silicon junction.
- Suffix "G" indicates Halogen-free part, ex.RB751SG.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

■ Outline

SOD-523



Dimensions in inches and (millimeters)

■ Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, SOD-523
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Weight : Approximated 0.002 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	RB751S	UNIT
Marking code		5	
Maximum Recurrent Peak Reverse Voltage	V_{RM}	30	V
Continuous reverse voltage	V_R	30	
Maximum Instantaneous Forward Voltage@1mA DC	V_F	0.37	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			30	mA
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}			200	mA
Reverse current	V_R = 30V DC	I_R			0.5	uA
Capacitance between terminals	V_R = 1V DC, f = 1MHz	C_T		2		pF

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■ Rating and characteristic curves

FIG.1-TYPICAL FORWARD CHARACTERISTICS

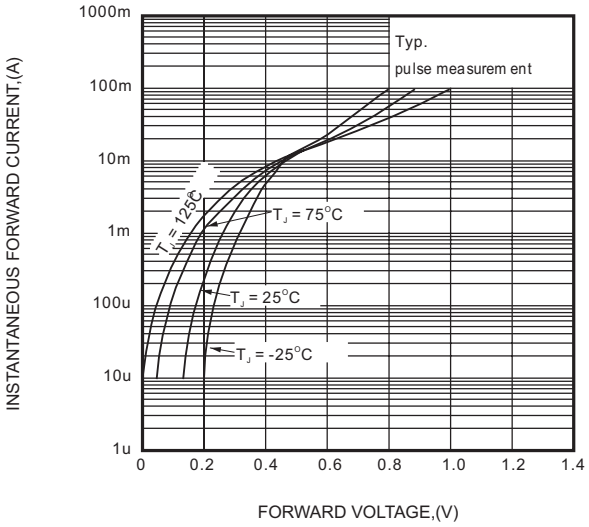


FIG.2 - TYPICAL REVERSE CHARACTERISTICS

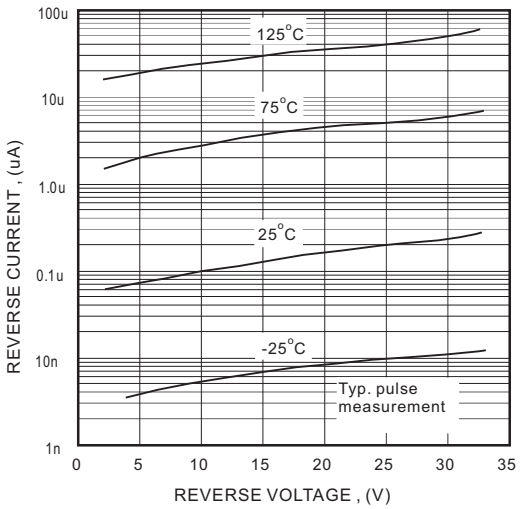
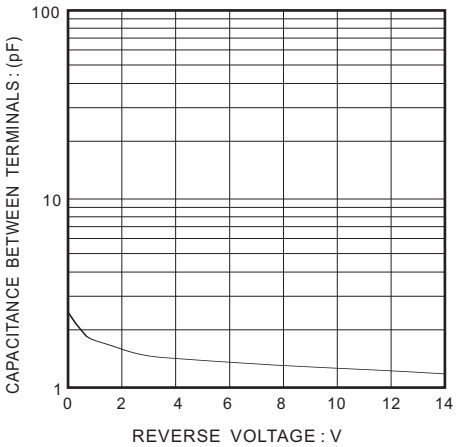
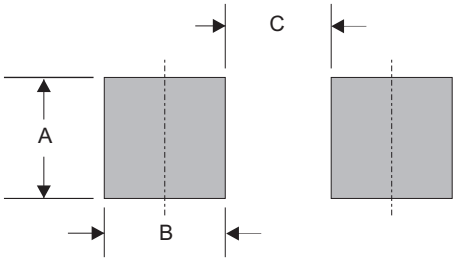


FIG.3-TYPICAL TERMINALS CAPACITANCE



Document ID : DS-22K1D
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■ SOD-523 foot print



A	B	C
0.032 (0.80)	0.024 (0.60)	0.043 (1.10)

Dimensions in inches and (millimeters)

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Document ID : DS-22K1D
Issued Date : 2010/05/05
Revised Date : 2012/05/31
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