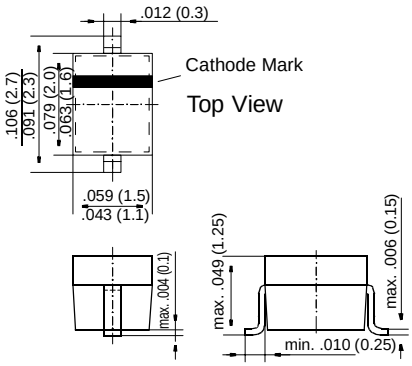
BB369S

Tuner Diodes

SOD-323



Dimensions in inches and (millimeters)

FEATURES

- Silicon epitaxial planar capacitance diodes with very wide effective capacitance variation for tunig the VHF range and hyperband in television tuners.
- These diodes are available as singles or as matched sets of two or more units according to the tracking condition described in the table of characteristics.

MECHANICAL DATA

Case: SOD-323 Plastic Package
Weight: approx. 0.004 g

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

	Symbol	Value	Unit
Reverse Voltage	V_R	32	V
Ambient Temperature	T_{amb}	125	°C
Storage Temperature Range	T_S	–55 to +125	°C

GENERAL SEMICONDUCTOR®

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ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at I_R = 100 µA	$V_{(BR)R}$	32	–	–	V
Leakage Current at V_R = 30 V	I_R	–	–	10	nA
Capacitance, f = 1 MHz at V_R = 28 V at V_R = 25 V at V_R = 1 V at V_R = 2 V	 C_{tot} C_{tot} C_{tot} C_{tot}	 2.65 2.75 55.0 42.5	 – – – –	 2.88 3.0 60.5 47.5	 pF pF pF pF
Effective Capacitance Ratio, f = 1 MHz at V_R = 1 to 28 V	$\frac{C_{tot}\ (1\ V)}{C_{tot}\ (28V)}$	20.0	–	23.0	–
Effective Capacitance Ratio at V_R = 2 to 25 V	$\frac{C_{tot}\ (2\ V)}{C_{tot}\ (25V)}$	15.3	–	17.8	–
Effective Capacitance Ratio at V_R = 1 to 2 V	$\frac{C_{tot}\ (1\ V)}{C_{tot}\ (2\ V)}$	1.29	–		–
Series Resistance at f = 300 MHz, C_{tot} = 25 pF	r_s	–	1.0	–	Ω
Series Inductance	L_S	–	2.5	–	nH
For any two of six consecutive diodes in the carrier tape, the maximum capacitance deviation in the reverse bias voltage of V_R = 0.5 to 28 V is max. 3.0%					