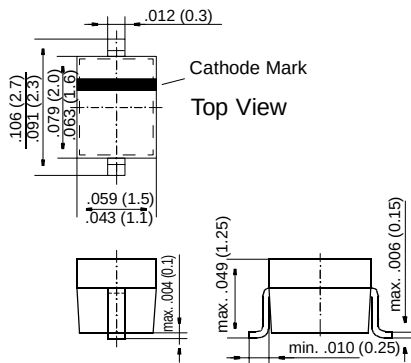


BB701S

Tuner Diodes

SOD-323



Dimensions in inches and (millimeters)

FEATURES

- ◆ Silicon epitaxial planar capacitance diode for tuning the frequency range of 950 ... 1750 MHz, especially suited for satellite TV 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_A	125	°C
Storage Temperature Range	T_S	-55 to +125	°C

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ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

	Symbol	Min.	Typ.	Max.	Unit
Capacitance at $f = 1 \text{ MHz}$ at $V_R = 1 \text{ V}$ at $V_R = 28 \text{ V}$	C_{tot} C_{tot}	8 0.9	– –	9 1.2	pF pF
Effective Capacitance Ratio at $V_R = 1$ to 28 V	$\frac{C_{\text{tot}}(1 \text{ V})}{C_{\text{tot}}(28 \text{ V})}$	8	–	9	–
Series Resistance at $f = 470 \text{ MHz}$, $C_{\text{tot}} = 9 \text{ pF}$	r_s	–	–	1.2	Ω
Leakage Current at $V_R = 30 \text{ V}$	I_R	–	–	30	nA
For any two of six consecutive diodes in the carrier tape the maximum capacitance deviation in the reverse bias voltage range of $V_R = 1 \text{ V}$ to $V_R = 28 \text{ V}$ is 2.5%					