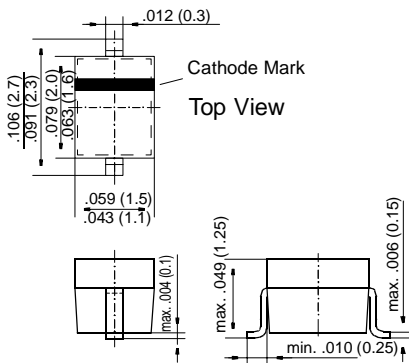


# BB701S


## 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

# BB701S

## ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

	Symbol	Min.	Typ.	Max.	Unit
Capacitance at f = 1 MHz at $V_R = 1\text{ V}$ at $V_R = 28\text{ V}$	$C_{\text{tot}}$ $C_{\text{tot}}$	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 MHz, $C_{\text{tot}} = 9\text{ pF}$	$r_s$	–	–	1.2	$\Omega$
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%