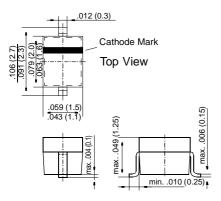
# **BB369S**

### **Tuner Diodes**

#### <u>SOD-323</u>



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 <sub>R</sub>	32	V
Ambient Temperature	T <sub>amb</sub>	125	°C
Storage Temperature Range	Τ <sub>S</sub>	-55 to +125	°C



## **BB369S**

### **ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified

	Symbol	Min.	Тур.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100 \ \mu A$	V <sub>(BR)R</sub>	32	-	-	V
Leakage Current at V <sub>R</sub> = 30 V	I <sub>R</sub>	-	-	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 <sub>tot</sub> C <sub>tot</sub> C <sub>tot</sub> C <sub>tot</sub>	2.65 2.75 55.0 42.5		2.88 3.0 60.5 47.5	pF pF pF pF
Effective Capacitance Ratio, $f = 1 \text{ MHz}$ at V <sub>R</sub> = 1 to 28 V	$\frac{C_{tot} (1 \text{ V})}{C_{tot} (28 \text{V})}$	20.0	_	23.0	-
Effective Capacitance Ratio at $V_R = 2$ to 25 V	C <sub>tot</sub> (2 V) C <sub>tot</sub> (25V)	15.3	_	17.8	-
Effective Capacitance Ratio at $V_R = 1$ to 2 V	$\frac{C_{tot} (1 \text{ V})}{C_{tot} (2 \text{ V})}$	1.29	_		-
Series Resistance at f = 300 MHz, C <sub>tot</sub> = 25 pF	r <sub>s</sub>	-	1.0	-	Ω
Series Inductance	L <sub>S</sub>	_	2.5	_	nH

voltage of  $V_R = 0.5$  to 28 V is max. 3.0%

