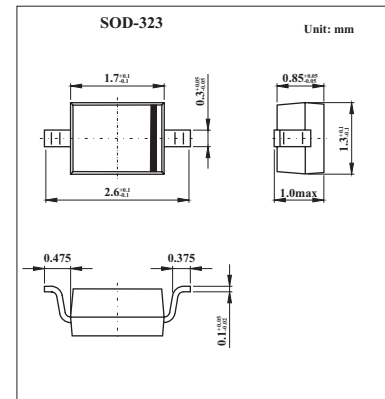


## Tuner Diodes

## BB731S

## ■ Features

- Silicon epitaxial planar capacitance diodes with very wide effective capacitance variation for tuning the VHF range 41 □ 170 MHz in hyper hyperband 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.

■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Value	Unit
Reverse Voltage	$V_R$	32	V
Ambient Temperature	$T_{amb}$	125	$^\circ\text{C}$
Storage Temperature Range	$T_s$	-55 to +125	$^\circ\text{C}$

■ Electrical Characteristics  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse Breakdown Voltage	$V_{BR(R)}$	$I_R = 100 \mu\text{A}$	32			V
Leakage Current	$I_R$	$V_R = 30\text{V}$			10	nA
Capacitance	$C_{tot}$	$f = 1\text{MHz}; V_R = 28\text{V}$	2.9		3.4	pF
		$f = 1\text{MHz}; V_R = 1\text{V}$	62		76	
Effective Capacitance Ratio	$C_{d(1V)}/C_{d(28V)}$	$f = 1\text{MHz}; V_R = 1\text{ to }28\text{V}$	19.5			
Series Resistance	$r_s$	$f = 300\text{MHz}, C_{tot} = 25\text{pF}$		1		$\Omega$
Series Inductance	$L_s$			2.5		nH