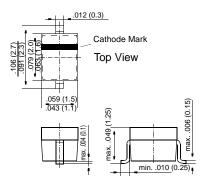
BB721S

Tuner Diodes

SOD-323



Dimensions in inches and (millimeters)

FEATURES

 Silicon epitaxial planar capacitance diodes with very wide effective capacitance variation for tuning the whole range of UHF television bands.



- Two BB721/BB721S tuner diodes in series are used for direct satellite receivers.
- 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.
- This diode is also available in SOD-123 case with the type designation BB721.

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	٧
Ambient Temperature	T _{amb}	125	ů
Storage Temperature Range	T _S	-55 to +125	°C



BB721S

ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

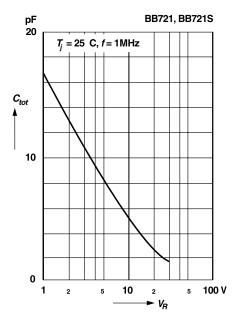
	Symbol	Min.	Тур.	Max.	Unit
Reverse Breakdown Voltage at I _R = 100 μA	V _{(BR)R}	32	_	_	V
Leakage Current at V _R = 30 V	I _R	_	_	10	nA
Capacitance f = 1 MHz at V_R = 28 V at V_R = 1 V	C _{tot} C _{tot}	1.9 17.5	-	2.3 20	pF pF
Effective Capacitance Ratio, f = 1 MHz at V _R = 1 to 28 V	C _{tot} (1 V) C _{tot} (28V)	8.2	-	9.8	_
Series Resistance at f = 470 MHz, C _{tot} = 14 pF	r _s	_	0.55	-	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. 2.5%.

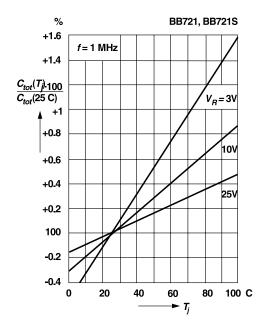


RATINGS AND CHARACTERISTIC CURVES BB721S

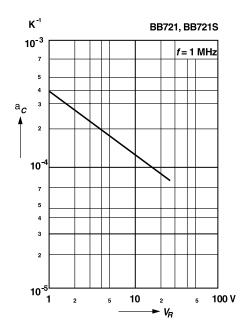
Capacitance versus reverse voltage



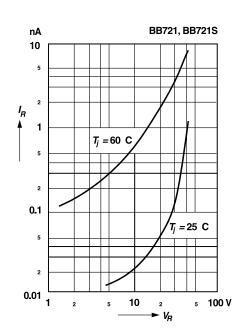
Relative capacitance versus junction temperature



Temperature coefficient of capacitance versus reverse voltage



Leakage current versus reverse voltage





RATINGS AND CHARACTERISTIC CURVES BB721S

Q-Factor versus frequency

