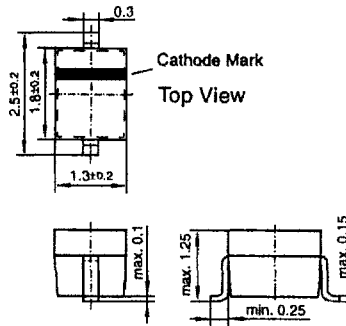


BB745S

Tuner Diode

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

These BB745S tuner diodes are available as singles or as matched sets of more units according to the tracking condition described in the table of characteristics.



SOD-323 Plastic Package
 Weight approx. 0.004 g
 Dimensions in mm

Absolute Maximum Ratings

	Symbol	Value	Unit
Reverse Voltage	V_R	32	V
Ambient Temperature	T_{amb}	125	°C
Storage Temperature Range	T_S	-55 to +125	°C

BB745S

Characteristics at $T_{amb} = 25\text{ }^{\circ}\text{C}$

	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	$V_{(BR)R}$	32	–	–	V
Leakage Current at $V_R = 30\text{ V}$	I_R	–	–	10	nA
Capacitance, $f = 1\text{ MHz}$ at $V_R = 28\text{ V}$ at $V_R = 1\text{ V}$	C_{tot} C_{tot}	1.8 18.5	– –	2.2 21.5	pF pF
Effective Capacitance Ratio, $f = 1\text{ MHz}$ at $V_R = 1\text{ to }28\text{ V}$	$\frac{C_{tot}(1\text{ V})}{C_{tot}(28\text{ V})}$	9.0	–	11.0	–
Series Resistance at $f = 470\text{ MHz}$, $C_{tot} = 14\text{ pF}$	r_s	–	0.65	–	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 $V_R = 0.5\text{ to }28\text{ V}$ is max. 2.5%					