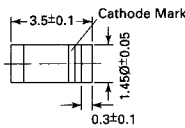


Tuner Diodes

Silicon Epitaxial Planar Capacitance Diodes in MiniMelf case especially suited for automatic insertion with very wide effective capacitance variation for tuning the whole range of VHF or UHF television bands.

These diodes are available as singles or as matched sets of two or more units according to the tracking condition described below.

The diodes are delivered taped.
Details see "Taping".

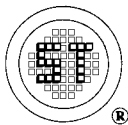


Glass case MiniMELF

Weight approx. 0.05g
Dimensions in mm

Absolute Maximum Ratings (T_a = 25 °C)

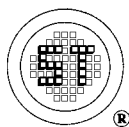
	Symbol	Value	Unit
Reverse Voltage	V _R	32	V
Junction Temperature	T _j	125	°C
Storage Temperature Range	T _s	-55 to + 150	°C



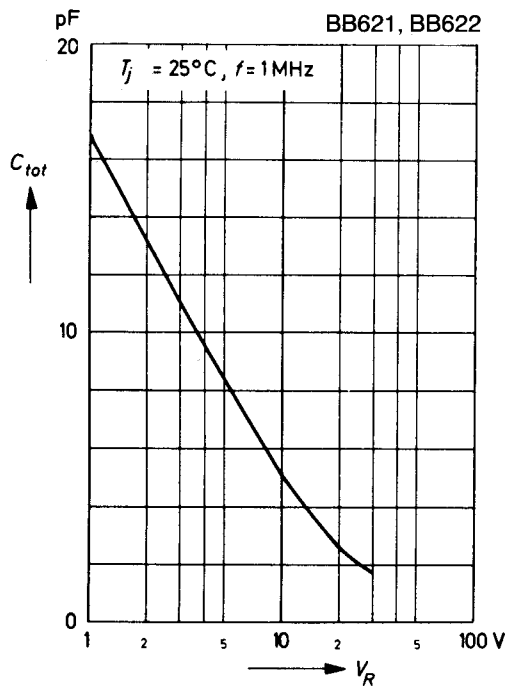
BB621, BB622

Characteristics at T_{amb} =25 °C

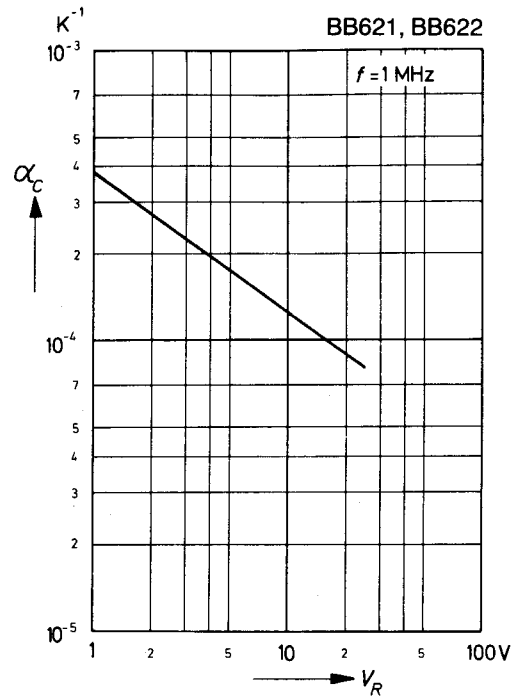
		Symbol	Min.	Typ.	Max.	Unit
Capacitance at V _R = 1 V at V _R = 3 V at V _R = 28 V	BB621 BB622	C _{tot}	-	17	-	pF
		C _{tot}	-	11	-	pF
		C _{tot}	1.8	-	2.2	pF
		C _{tot}	1.8	-	2.5	pF
Effective Capacitance Ratio at V _R = 1 to 28 V	BB621	$\frac{C_{tot}(1V)}{C_{tot}(28V)}$	8	-	9.5	-
	BB622	$\frac{C_{tot}(1V)}{C_{tot}(28V)}$	7.3	-	9.5	-
Series Resistance at f = 470 MHz, C _{tot} = 9 pF	BA621 BA622	r _s	-	0.55	0.7	Ω
		r _s	-	0.8	1	Ω
Cutoff Frequency for Q = 1 at V _R = 3 V	BA621 BA622	f _{Q1}	-	24	-	GHz
		f _{Q1}	-	16	-	GHz
Series Resonance Frequency at V _R = 25 V		f ₀	-	2.5	-	GHz
Series Inductance		L _s	-	2	-	nH
Leakage Current at V _R = 30 V		I _R	-	-	30	nA
Reverse Breakdown Voltage at I _R = 10 μA		V _{(BR)R}	32	-	-	V
For any two diodes of a matched group the following tracking condition applies: In the reverse bias voltage range of V _R = 0.5 V to V _R = 28 V the maximum capacitance deviation is 2.5 %.						



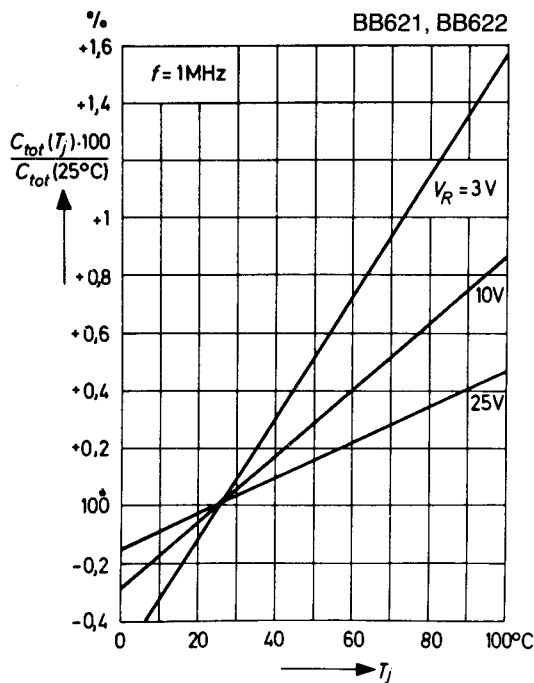
Capacitance versus reverse voltage



Temperature coefficient of capacitance versus reverse voltage



Relative capacitance versus junction temperature



Leakage current versus reverse voltage

