

SOLID STATE TUNER COMPONENTS

Variable-Capacitance Tuner Diodes (delivered in matched sets)

Type	Package	Capacitance		Capacitance Ratio				Series Resistance		Reverse Current				
		min. pF	max. pF	at V_R V	min.	max.	at $V_R =$ V to V	Ω typ.	Ω max.	at f MHz	and C pF	max. nA	at V_R V	
BB221	DO-35	1.8	2.2	28	8.0	9.5	1	28	0.55	0.7	470	9	30	30
BB222	DO-35	1.8	2.5	28	7.3	9.5	1	28	0.80	1.0	470	9	30	30
BB329	DO-35	2.5	3.2	28	12	—	1	28	0.85	—	330	25	30	30
BB404A***	TO-236	42	43.5	2	1.65	1.75	2	8	—	0.4	100	38	20	10
BB404B	TO-236	43	44.5	2	1.65	1.75	2	8	—	0.4	100	38	20	10
BB404C	TO-236	44	45.5	2	1.65	1.75	2	8	—	0.4	100	38	20	10
BB404D	TO-236	45	46.5	2	1.65	1.75	2	8	—	0.4	100	38	20	10
BB404E	TO-236	46	47.5	2	1.65	1.75	2	8	—	0.4	100	38	20	10
BB510	TO-236**	440	600	1	15	—	1	9	—	—	—	—	30	10
BB521*	DO-35	1.8	2.2	28	8.0	9.5	1	28	0.55	0.7	470	9	30	30
BB523	DO-35	1.9	2.25	28	9.5	15	1	28	—	0.8	470	14	30	30
BB529*	DO-35	2.5	3.2	28	12	—	1	28	0.85	—	330	25	30	30
BB531	DO-35	3.15	3.55	28	19.5	25	1	28	0.9	1.0	300	25	30	30
BB601	≈60A2	0.9	1.2	28	8.0	9	1	28	—	1.2	470	9	30	30
BB621*	MiniMELF	1.8	2.2	28	8.0	9.5	1	28	0.55	0.7	470	9	30	30
BB622	MiniMELF	1.8	2.5	28	7.3	9.5	1	28	0.80	1.0	470	9	30	30
BB623	MiniMELF	1.9	2.25	28	9.5	15	1	28	—	0.8	470	14	30	30
BB629*	MiniMELF	2.5	3.2	28	12	—	1	28	0.85	—	330	25	30	30
BB631	MiniMELF	3.15	3.55	28	19.5	25	1	28	0.9	1.0	300	25	30	30
BB721	≈60A2	2.0	2.29	28	8.0	—	1	28	—	0.5	470	14	30	30
BB723	≈60A2	1.9	2.25	28	9.5	15	1	28	—	0.8	470	14	30	30
BB729	≈60A2	2.38	2.93	28	12	—	1	28	—	0.8	470	25	30	30
BB731	≈60A2	3.15	3.55	28	19.5	25	1	28	0.9	1.0	300	25	30	30

* These types are successors of types BB221 and BB329 respectively, providing an improved linearity of the capacitance versus reverse bias curve.

** Pins 1 and 2: Cathode, Pin 3: Anode

*** The types BB404 are dual capacitance diodes with common cathode. Pin 1: Cathode, Pin 2: Anode 1, Pin 3: Anode 2.

High Frequency Diode Switches for Bandswitching

Type	Package	Reverse Voltage	Forward Current at $T_A = 25^\circ\text{C}$	Forward Voltage Drop at $I_F = 100\text{ mA}$	Reverse Current at $V_R = 20\text{ V}$	Forward Dynamic Impedance at $f = 50\text{--}1000\text{ MHz}$		Series Inductance Directly Across Package	Capacitance at $V_R = 3\text{ V}$, $f = 1\text{ MHz}$	
		max. Volts	max. mA	max. Volts	max. nA	typ. Ω	max. Ω		at I_F mA	nH typ.
BA243A	DO-35	35	100	1.0	50	0.7	1.0	10	2.5	1.80
BA244A	DO-35	35	100	1.0	50	0.4	0.5	10	2.5	1.80
BA282	DO-35	35	100	1.0	50	—	0.7	3.0	2.5	1.25
BA283	DO-35	35	100	1.0	50	—	1.2	3.0	2.5	1.20
BA682	MiniMELF	35	100	1.0	50	—	0.7	3.0	2.0	1.25
BA683	MiniMELF	35	100	1.0	50	—	1.2	3.0	2.0	1.20