

# Tuner Diodes and Diode Switches

## Variable-Capacitance Tuner Diodes (SOT23 or SOD123 or SOD323 Plastic Package) 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	$\Omega$ typ.	$\Omega$ max.	at f MHz	and C pF	max. nA	at $V_R$ V	
<b>BB404A*</b>	SOT23	42	43.5	2	1.65	1.75	2	8	–	0.4	100	38	20	10
<b>BB404B</b>	SOT23	43	44.5	2	1.65	1.75	2	8	–	0.4	100	38	20	10
<b>BB404C</b>	SOT23	44	45.5	2	1.65	1.75	2	8	–	0.4	100	38	20	10
<b>BB404D</b>	SOT23	45	46.5	2	1.65	1.75	2	8	–	0.4	100	38	20	10
<b>BB404E</b>	SOT23	46	47.5	2	1.65	1.75	2	8	–	0.4	100	38	20	10
<b>BB814*</b>	SOT23	43	46.5	2	1.95	2.35	2	8	–	0.4	100	38	20	16
<b>BB721</b>	SOD123	1.9	2.29	28	8.0	–	1	28	–	0.5	470	14	10	30
<b>BB723</b>	SOD123	1.9	2.25	28	9.5	15	1	28	–	0.8	470	14	10	30
<b>BB729</b>	SOD123	2.38	2.93	28	12	–	1	28	–	0.8	470	25	10	30
<b>BB730</b>	SOD123	2.7	2.9	28	14.8	16.8	1	28	–	0.9	330	25	30	28
<b>BB731</b>	SOD123	3.15	3.55	28	19.5	25	1	28	0.9	1.0	300	25	30	28
<b>BB702</b>	SOD323	0.65	0.9	28	11.6	14	1	28	1.2	1.5	470	9	10	30
<b>BB701S</b>	SOD323	0.9	1.2	28	8.0	9	1	28	–	1.2	470	9	10	30
<b>BB721S</b>	SOD323	2.0	2.29	28	8.0	–	1	28	–	0.5	470	14	10	30
<b>BB723S</b>	SOD323	1.9	2.25	28	9.5	15	1	28	–	0.8	470	14	10	30
<b>BB729S</b>	SOD323	2.38	2.93	28	12	–	1	28	–	0.8	470	25	10	30
<b>BB730S</b>	SOD323	2.7	2.9	28	14.8	16.8	1	28	–	0.9	330	25	30	28
<b>BB731S</b>	SOD323	3.15	3.55	28	19.5	25	1	28	0.9	1.0	300	25	30	28

\* The types BB404A and BB814 are dual capacitance diodes with common cathode. Pin 1: Cathode, Pin 2: Anode 1, Pin 3: Anode 2.

## High Frequency Diode Switches for Bandswitching (SOD123 or SOD323 Plastic Package)

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. $\Omega$	max. $\Omega$		at $I_F$ mA	nH typ.
<b>BA782</b>	SOD123	35	100	1.0	50	–	0.7	3.0	2.5	1.25
<b>BA783</b>	SOD123	35	100	1.0	50	–	1.2	3.0	2.5	1.20
<b>BA782S</b>	SOD323	35	100	1.0	50	–	0.7	3.0	2.5	1.25
<b>BA783S</b>	SOD323	35	100	1.0	50	–	1.2	3.0	2.5	1.2