

SECTION 4

VARICAP DIODES

type number	selection guide page	data sheet page
BA481	4 - 6	4 -
BB119	4 - 3	4 -
BB131	4 - 4	4 -
BB132	4 - 4	4 -
BB133	4 - 4	4 -
BB134	4 - 5	4 -
BB135	4 - 5	4 -
BB146	4 - 5	4 -
BB147	4 - 4	4 -
BB148	4 - 4	4 -
BB149	4 - 5	4 -
BB150	4 - 4	4 -
BB155	4 - 6	4 -
BB158	4 - 4	4 -
BB159	4 - 5	4 -
BB215	4 - 5	4 -

continued on next page

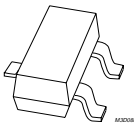

type number	selection guide page	data sheet page
BB405B	4 - 5	4 -
BB417	4 - 6	4 -
BB804	4 - 3	4 -
BB809	4 - 4	4 -
BB901	4 - 4	4 -
BB909A; BB909B	4 - 4	4 -
BB910	4 - 4	4 -
BB911/A	4 - 4	4 -
BBY31	4 - 5	4 -
BBY39	4 - 5	4 -
BBY40	4 - 4	4 -
BBY42	4 - 4	4 -
BBY62	4 - 5	4 -

Varicap diodes

Selection guide

VARICAP DIODES

RADIO VARICAP DIODES

TYPE NUMBER	C _d @ V _R		TUNING RANGE			r _s max	MATCHED SETS	DOUBLE DIODE	PACKAGE (not to scale)
			C _d over voltage range						
	(pF)	(V)	ratio	V ₁ (V)	V ₂ (V)	(Ω)	(%)		
FM radio tuning									
BB804	26	8	1.7	2	8	0.2 ⁽²⁾	–	yes ⁽¹⁾	 SOT23
Automatic frequency control									
BB119	17	10	1.3	4	10	1.5	–	no	 SOD27 (DO35)

Note

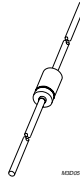
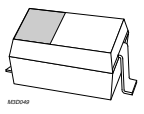
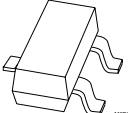
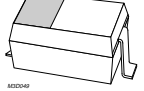
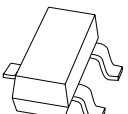
1. Common cathode.
2. Typical value.

Varicap diodes

Selection guide

VARICAP DIODES (continued)

TV/SATELLITE VARICAP DIODES

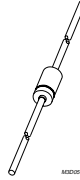
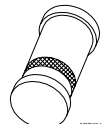
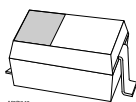
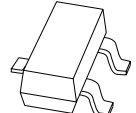
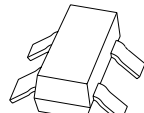
TYPE NUMBER	C_d @ V_R		TUNING RANGE			r_s max.	MATCHED SETS	DOUBLE DIODE	PACKAGE (not to scale)
			C_d over voltage range						
	(pF)	(V)	ratio	V_1 (V)	V_2 (V)	(Ω)	(%)		
VHF tuning									
BB809	4.7	28	9	1	28	0.6	3	no	 SOD68 (DO34)
BB909A	>2.6	28	13.5	1	28	0.9	2.5	no	
BB909B	>2.8	28	13.5	1	28	0.9	2.5	no	
BB910	2.5	28	16	0.5	28	1	2.5	no	
BB911/A	2.7	28	25	0.5	28	2	2.5	no	
BB132	2.5	28	26	0.5	28	2	1	no	 SOD323
BB133	2.5	28	16	0.5	28	0.9	0.7	no	
BB147	2.6	28	40	0.5	28	2.8	2	no	
BB148	2.6	28	15	1	28	0.9	1	no	
BB150	2.5	28	16	0.5	28	0.9	—	no	
BB158	2.6	28	15	1	28	0.9	—	no	
BBY40	4.6	25	5.5	3	25	0.7	—	no	 SOT23
BBY42	2.7	28	14	1	28	1	—	no	
Coupling									
BB131	1	28	14	0.5	28	3	—	no	 SOD323
BB901	1	28	13.5	0.5	28	3	—	no	 SOT23

Varicap diodes

Selection guide

VARICAP DIODES (continued)

TV/SATELLITE VARICAP DIODES (continued)

TYPE NUMBER	C _d @ V _R		TUNING RANGE			r _s max.	MATCHED SETS	DOUBLE DIODE	PACKAGE (not to scale)
			C _d over voltage range						
	(pF)	(V)	ratio	V ₁ (V)	V ₂ (V)	(Ω)	(%)		
UHF tuning									
BB405B	2	28	8.3	1	28	0.75	3	no	 SOD68 (DO34)
BB215	2	28	8.3	1	28	0.75	3	no	 SOD80
BB134	1.9	28	10	0.5	28	0.75	0.5	no	 SOD323
BB135	1.9	28	10	0.5	28	0.75	—	no	
BB146	1.9	28	20	0.5	28	1.4	1.6	no	
BB149	2.1	28	9	1	28	0.75	1	no	
BB159	2.1	28	9	1	28	0.75	—	no	
BBY31	1.9	28	8.3	1	28	1.2	—	no	 SOT23
BBY39	1.9	28	8.3	1	28	1.2	—	yes ⁽¹⁾	
BBY62	1.9	28	8.3	1	28	1.2	—	yes	 SOT143

Note

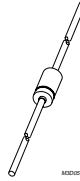
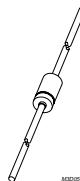
1. Common cathode.

Varicap diodes

Selection guide

VARICAP DIODES (continued)

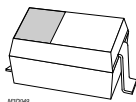
TV/SATELLITE VARICAP DIODES (continued)

TYPE NUMBER	C _d @ V _R		TUNING RANGE			r _s max.	MATCHED SETS	DOUBLE DIODE	PACKAGE (not to scale)
			C _d over voltage range						
	(pF)	(V)	ratio	V ₁ (V)	V ₂ (V)	(Ω)	(%)		
UHF mixing⁽¹⁾									
BA481	1.1 ⁽²⁾	0	—	—	—	13	—	no	 SOD68 (DO34)
Automatic frequency control									
BB417	3	15	3.5	4	15	0.75	—	no	 SOD68 (DO34)

Notes

1. See also 1PS76SB17 and BAT17 in Section 2 for UHF mixer applications.
2. Maximum value.

VCO TUNING

TYPE NUMBER	TUNING RANGE				r _s max.	MATCHED SETS	DOUBLE DIODE	PACKAGE (not to scale)
	C _d @ V _R		C _d @ V _R					
	min./max. (pF)	(V)	min./max. (pF)	(V)	(Ω)	(%)		
BB155	45.2/49.8	0.34	24.55/26.7	2.82	0.6	—	no	 SOD323