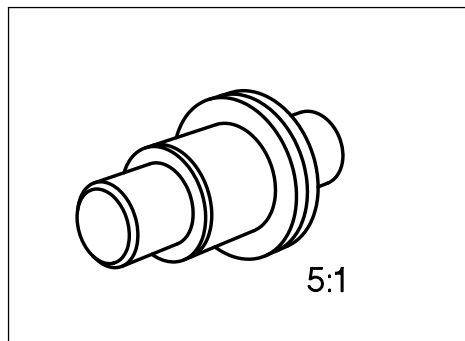


Silicon Tuning Varactors

BBY 34 C
BBY 34 D

- Hyperabrupt junction tuning diode
- Frequency linear tuning range 4 ... 12 V
- High figure of merit



Type	Marking	Ordering Code	Pin Configuration	Package ¹⁾
BBY 34 C	–	Q62702-B257		D
BBY 34 D		Q62702-B194		

Maximum Ratings

Parameter	Symbol	Values	Unit
Reverse voltage	V_R	22	V
Forward current	I_F	400	mA
Junction temperature	T_j	175	°C
Storage temperature range	T_{stg}	– 55 ... + 150	
Operating temperature range	T_{op}	– 55 ... + 150	

¹⁾ For detailed information see chapter Package Outlines.

Electrical Characteristics

at $T_A = 25\text{ °C}$, unless otherwise specified.

Parameter	Symbol	Values			Unit
		min.	typ.	max.	

BBY 34 C

Reverse current $V_R = 20\text{ V}$	I_R	–	–	10	nA
Diode capacitance $V_R = 2\text{ V}, f = 1\text{ MHz}$ $V_R = 10\text{ V}, f = 1\text{ MHz}$	C_T	3.4 –	– –	– 1.7	pF
Capacitance ratio $V_{R1} = 2\text{ V}, V_{R2} = 20\text{ V}$	$\frac{C_{T2}}{C_{T20}}$	4.3	–	–	–
Figure of merit $V_R = 4\text{ V}, f = 50\text{ MHz}$	Q	400	–	–	–

BBY 34 D

Reverse current $V_R = 20\text{ V}$	I_R	–	–	10	nA
Diode capacitance $V_R = 4\text{ V}, f = 1\text{ MHz}$	C_T	3.2	–	3.8	pF
Capacitance ratio $V_{R1} = 4\text{ V}, V_{R2} = 20\text{ V}$	$\frac{C_{T4}}{C_{T20}}$	2.7	–	–	–
Figure of merit $V_R = 4\text{ V}, f = 50\text{ MHz}$	Q	400	–	–	–