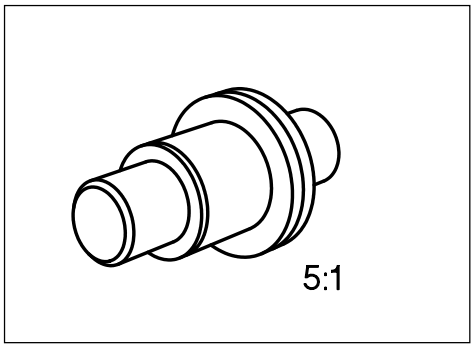
SIEMENS

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 °C, unless otherwise specified.

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
BBY 34 C					
Reverse current V_R = 20 V	I_R	–	–	10	nA
Diode capacitance V_R = 2 V, f = 1 MHz V_R = 10 V, f = 1 MHz	C_T	 3.4 –	 – –	 – 1.7	pF
Capacitance ratio V_{R1} = 2 V, V_{R2} = 20 V	$\frac{C_{T2}}{C_{T20}}$	4.3	–	–	–
Figure of merit V_R = 4 V, f = 50 MHz	Q	400	–	–	–
BBY 34 D					
Reverse current V_R = 20 V	I_R	–	–	10	nA
Diode capacitance V_R = 4 V, f = 1 MHz	C_T	3.2	–	3.8	pF
Capacitance ratio V_{R1} = 4 V, V_{R2} = 20 V	$\frac{C_{T4}}{C_{T20}}$	2.7	–	–	–
Figure of merit V_R = 4 V, f = 50 MHz	Q	400	–	–	–