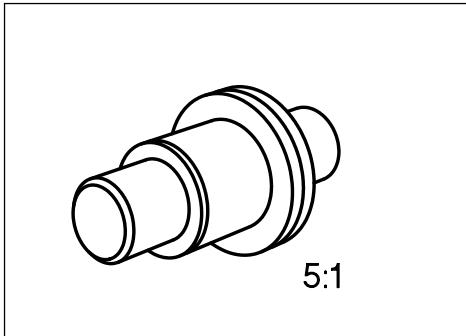


# SIEMENS

## 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 <sup>1)</sup>
BBY 34 C	–	Q62702-B257	1 └── 2	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	

<sup>1)</sup> For detailed information see chapter Package Outlines.

**Electrical Characteristics**at  $T_A = 25^\circ\text{C}$ , 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	—	—	—