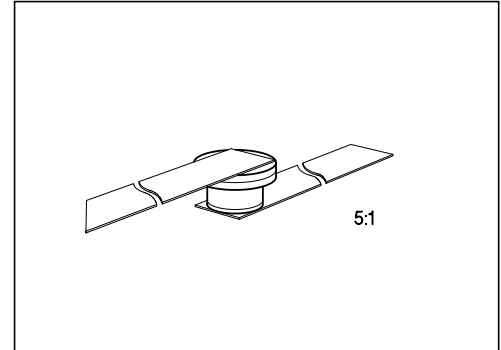


## Silicon Tuning Varactors

**BBY 24  
... BBY 27**

- Abrupt junction tuning diode
- Tuning range 120 V



Type	Marking	Ordering Code	Pin Configuration	Package <sup>1)</sup>
BBY 24-S1	–	Q62702-B20-S1		P
BBY 25-S1		Q62702-B21-S1		
BBY 26-S1		Q62702-B22-S1		
BBY 27-S2		Q62702-B23-S2		

### Maximum Ratings

Parameter	Symbol	Values		Unit
		BBY 24 ... 26	BBY 27	
Reverse voltage	$V_R$	120	140	V
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  $T_A = 25\text{ °C}$ , unless otherwise specified.

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
Reverse current $V_R = 100\text{ V}$	$I_R$	–	–	10	nA
Diode capacitance $V_R = 0, f = 1\text{ MHz}$	$C_T$				pF
BBY 24		12	–	16	
BBY 25		16	–	20	
BBY 26		20	–	24	
BBY 27		36	–	40	
Capacitance ratio $V_{R1} = 0, V_{R2} = 120\text{ V}$	$\frac{C_{T0}}{C_{T120}}$				–
BBY 24		8.5	–	–	
BBY 25		9.0	–	–	
BBY 26		9.5	–	–	
BBY 27		9.5	–	–	
Figure of merit $V_R = 4\text{ V}, f = 50\text{ MHz}$	$Q$	200	–	–	–
Slope of characteristics $V_{R1} = 0, V_{R2} = 120\text{ V}$	$n$	2	–	2.15	–