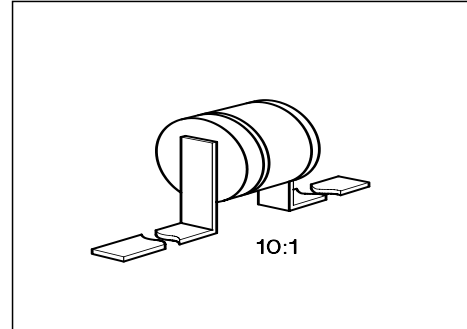


## Silicon Tuning Varactor

**BBY 35 F**

- 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 35 F	–	Q62702-B195	Cathode: black dot, heat sink 	T1

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

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
Breakdown voltage $I_R = 10\ \mu\text{A}$	$V_{(BR)}$	22	–	–	V
Reverse current $V_R = 20\ \text{V}$	$I_R$	–	–	10	nA
Diode capacitance $V_{R1} = 4\ \text{V}, f = 1\ \text{MHz}$ $V_{R2} = 20\ \text{V}, f = 1\ \text{MHz}$	$C_T$	8.5 2.1	– –	10 2.4	pF
Capacitance ratio $V_{R1} = 4\ \text{V}, V_{R2} = 20\ \text{V}$	$\frac{C_{T4}}{C_{T20}}$	3.5	–	–	–
Figure of merit $V_R = 4\ \text{V}, f = 50\ \text{MHz}$	$Q$	250	350	–	–