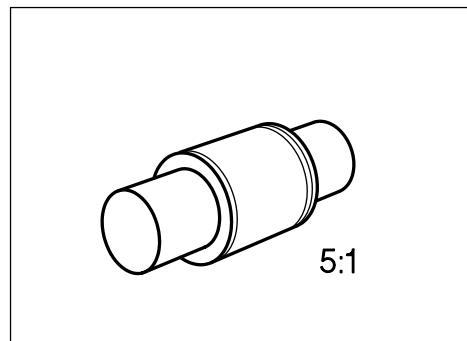



## Silicon Tuning Varactor

**BBY 33 BB-2**

- Tuning varactor in passivated Mesa technology (epitaxial design)



| Type        | Marking | Ordering Code | Pin Configuration   | Package <sup>1)</sup> |
|-------------|---------|---------------|---|-----------------------|
| BBY 33 BB-2 | –       | Q62702-B70    | Cathode: black dot,<br>heat sink<br> | C 1                   |

### Maximum Ratings

| Parameter                   | Symbol    | Values         | Unit |
|-----------------------------|-----------|----------------|------|
| Reverse voltage             | $V_R$     | 27             | V    |
| Forward current             | $I_F$     | 200            | 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  $T_A = 25\text{ }^\circ\text{C}$ , unless otherwise specified.

| Parameter  | Symbol                   | Values |      |      | Unit |
|--|--------------------------|--------|------|------|------|
|  |                          | min.   | typ. | max. |      |
| Forward voltage<br>$I_F = 200\text{ mA}$                 | $V_F$                    | –      | –    | 1.1  | V    |
| Reverse current<br>$V_R = 15\text{ V}$                   | $I_R$                    | –      | –    | 5    | nA   |
| Diode capacitance<br>$V_R = 0$                           | $C_T$                    | 0.9    | –    | 1.5  | pF   |
| Capacitance ratio<br>$V_R = 0, V_R = 25\text{ V}$        | $\frac{C_{T0}}{C_{T25}}$ | –      | 3.0  | –    | –    |
| Figure of merit<br>$V_R = 4\text{ V}, f = 50\text{ MHz}$ | $Q_{(\min)}$             | 4000   | –    | –    | –    |