

Silicon Varicap Diode

BB404C

44pF – 45.5pF

DATASHEET

OEM – ITT

Source:

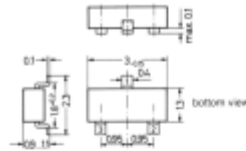
ITT databook discrete semiconductors for surface mounting 1991

BB404

Tuner Diode

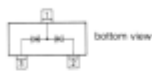
Si Epitaxial Planar Dual Capacitance Diode for tuning in the VHF range, especially in car receivers.

These diodes are delivered taped.
Details see "Taping".



Plastic Package JEDEC TO-236
23 A 3 according to DIN 41869

Weight approx. 0.01 g
Dimension in mm



Marking code

| Type | Marking |
|--------|---------|
| BB404A | A4 |
| BB404B | B4 |
| BB404C | C4 |
| BB404D | D4 |
| BB404E | E4 |

Absolute Maximum Ratings

| | Symbol | Value | Unit |
|---------------------------|--------|-------------|------|
| Reverse Voltage | V_R | 15 | V |
| Junction Temperature | T_j | 125 | °C |
| Storage Temperature Range | T_S | -55 to +125 | °C |

BB404

Characteristics at $T_j = 25\text{ }^\circ\text{C}$

| | Symbol | Min. | Typ. | Max. | Unit |
|---|---|------|------|------|----------|
| Capacitance at $f = 1\text{ MHz}$, $V_R = 2\text{ V}$ | Group A C_{tot} | 42 | – | 47.5 | pF |
| | B C_{tot} | 42 | – | 43.5 | pF |
| | C C_{tot} | 43 | – | 44.5 | pF |
| | D C_{tot} | 44 | – | 45.5 | pF |
| | E C_{tot} | 45 | – | 46.5 | pF |
| Effective Capacitance Ratio at $V_R = 2\text{ to }8\text{ V}$ | $\frac{C_{tot}(2\text{ V})}{C_{tot}(8\text{ V})}$ | 1.65 | – | 1.75 | – |
| Series Resistance at $f = 100\text{ MHz}$, $C_{ext} = 38\text{ pF}$ | r_s | – | – | 0.4 | Ω |
| Leakage Current at $V_R = 10\text{ V}$ | I_R | – | – | 20 | nA |
| Basic Tolerance ¹⁾ at $V_R = 2\text{ V}$ | K | – | – | 1 | % |
| ¹⁾ Difference of capacitance values of the individual diodes in one package. | | | | | |