

# Silicon Varicap Diode

## **BB404D**

45pF – 46.5pF

# DATASHEET

OEM – ITT

Source:

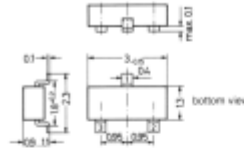
ITT databook discrete semiconductors for surface mounting 1991

## BB404

### Tuner Diode

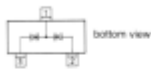
Si Epitaxial Planar Dual Capacitance Diode for tuning in the VHF range, especially in car receivers.

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	$\Omega$
Leakage Current at $V_R = 10\text{ V}$	$I_R$	–	–	20	nA
Basic Tolerance <sup>1)</sup> at $V_R = 2\text{ V}$	$ K $	–	–	1	%

<sup>1)</sup> Difference of capacitance values of the individual diodes in one package.