

**NPN Silicon RF Transistors**

**BF 362**

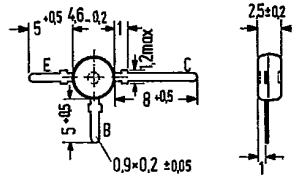
**BF 363**

SIEMENS AKTIENGESELLSCHAFT

**for UHF TV tuners**

BF 362 and BF 363 are NPN silicon planar RF transistors in a plastic package similar to TO 119 (50 B3 DIN 41867). BF 362 is particularly suitable for gain-controlled input stages, and BF 363 for self-oscillating mixer stages in TV UHF tuners.

Type	Ordering code
BF 362	Q62702-F395
BF 363	Q62702-F396



Approx. weight 0.25 g Dimensions in mm

**Maximum ratings**

	BF 362, BF 363	
Collector-emitter voltage	$V_{CEO}$	20 V
Collector-base voltage	$V_{CBO}$	20 V
Emitter-base voltage	$V_{EBO}$	3 V
Collector current	$I_C$	20 mA
Junction temperature	$T_j$	125 °C
Storage temperature range	$T_{stg}$	-55 to +125 °C
Total power dissipation ( $T_{amb} \leq 55^\circ\text{C}$ )	$P_{tot}$	120 mW

**Thermal resistance**

Junction to ambient air	$R_{thJA}$	$\leq 580$ K/W
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**Static characteristics ( $T_{amb} = 25^\circ\text{C}$ )**

Base current ( $I_E = 3 \text{ mA}; V_{CB} = 10 \text{ V}$ )	$I_B$	$< 150$ $\mu\text{A}$
Base current ( $I_E = 12 \text{ mA}; V_{CB} = 7 \text{ V}$ )	$I_B$	$< 1$ mA
Base-emitter forward voltage ( $I_C = 2 \text{ mA}; V_{CE} = 10 \text{ V}$ )	$V_{BE}$	750 mV

T-31-15

BF 362  
 BF 363

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Dynamic characteristics ( $T_{amb} = 25^{\circ}\text{C}$ )		BF 362	BF 363		
Transition frequency ( $I_C = 3 \text{ mA}; V_{CE} = 10 \text{ V}; f = 100 \text{ MHz}$ )		$f_T$	800	600-820	MHz
Power gain ( $I_C = 3 \text{ mA}; V_{CB} = 10 \text{ V}; f = 900 \text{ MHz}; R_g = 50 \Omega; R_L = 500 \Omega$ )		$G_p$	> 11	> 11	dB
Noise figure ( $I_C = 3 \text{ mA}; V_{CB} = 10 \text{ V}$ ) at $f = 500 \text{ MHz}; Y_g = 16.7 \text{ mS}$		NF	4	4	dB
at $f = 800 \text{ MHz}; Y_g = 16.7 \text{ mS}$		NF	4.5	5	dB
Short-circuit reverse transfer capacitance ( $I_C = 1 \text{ mA}; V_{CE} = 10 \text{ V}; f = 1 \text{ MHz}$ )		$-C_{12e}$	0.33	0.33	pF
Small-signal short-circuit reverse transfer admittance ( $I_C = 3 \text{ mA}; V_{CB} = 10 \text{ V}; f = 900 \text{ MHz}$ )		$ y_{12b} $	0.95	0.95	mS

This datasheet has been download from:

[www.datasheetcatalog.com](http://www.datasheetcatalog.com)

Datasheets for electronics components.