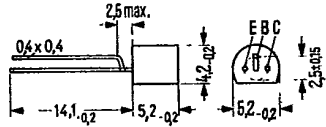


SIEMENS AKTIENGESELLSCHAFT 1 D \_\_\_\_\_

BF 562 is an NPN silicon RF transistor in TO 92 plastic package (10 A 3 DIN 41868).  
 The transistor is particularly suitable for controllable VHF input stages in TV tuners.

Type	Ordering code
BF 562	Q62702-F542



Mounting instruction: Fixing hole dia 0.6  
 Approx. weight 0.25 g Dimensions in mm

**Maximum ratings ( $T_{amb} = 25^{\circ}\text{C}$ )**

Collector-emitter voltage	$V_{CEO}$	20	V
Collector-base voltage	$V_{CBO}$	30	V
Emitter-base voltage	$V_{EBO}$	3	V
Collector current	$I_C$	20	mA
Junction temperature	$T_j$	150	$^{\circ}\text{C}$
Storage temperature range	$T_{stg}$	-55 to +150	$^{\circ}\text{C}$
Total power dissipation ( $T_{amb} \leq 45^{\circ}\text{C}$ )	$P_{tot}$	250	mW

**Thermal resistance**

Junction to ambient air	$R_{thJA}$	$\leq 420$	K/W
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**Static characteristics ( $T_{amb} = 25^{\circ}\text{C}$ )**

Base current ( $I_C = 3 \text{ mA}; V_{CE} = 10 \text{ V}$ )	$I_B$	$\leq 150$	$\mu\text{A}$
( $I_C = 10 \text{ mA}; V_{CE} = 7 \text{ V}$ )	$I_B$	$\leq 2$	$\text{mA}$
Collector-emitter breakdown voltage ( $I_C = 1 \text{ mA}$ )	$V_{(BR)CEO}$	$\geq 20$	$\text{V}$
Collector-base breakdown voltage ( $I_C = 10 \mu\text{A}$ )	$V_{(BR)CBO}$	$\geq 30$	$\text{V}$
Emitter-base breakdown voltage ( $I_E = 10 \mu\text{A}$ )	$V_{(BR)EBO}$	$\geq 3$	$\text{V}$

**Dynamic characteristics ( $T_{amb} = 25^{\circ}\text{C}$ )**

Transition frequency ( $I_C = 2.5 \text{ mA}; V_{CE} = 10 \text{ V}; f = 100 \text{ MHz}$ )	$f_T$	600	$\text{MHz}$
Power gain ( $I_C = 2.5 \text{ mA}; V_{CE} = 10 \text{ V}; f = 200 \text{ MHz};$ $R_g = 60 \Omega; R_L = 920 \Omega$ )	$G_{pb}$	16	$\text{dB}$
Noise figure ( $I_C = 2.5 \text{ mA}; V_{CE} = 10 \text{ V}; f = 200 \text{ MHz};$ $R_g = 60 \Omega$ )	$NF$	3	$\text{dB}$
Reverse transfer capacitance ( $I_C = 1 \text{ mA}; V_{CE} = 10 \text{ V}; f = 1 \text{ MHz}$ )	$-C_{12e}$	0.65	$\text{pF}$
Reverse transfer capacitance ( $V_{BE} = 0; V_{CB} = 10 \text{ V}; f = 1 \text{ MHz}$ )	$-C_{12b}$	0.12	$\text{pF}$