

BF 979 S

D. _____

The transistor is particularly suitable for use in uncontrolled UHF and VHF input stages featuring low cross modulation.

Technical drawing of a mechanical part with dimensions and labels. The drawing includes a top view and a side view. Key dimensions and labels are:

- Top view dimensions: 5, 4.6, 0.2, 1.2 max, 8, 0.5, 0.9 x 0.2 ± 0.05.
- Side view dimensions: 2.5 ± 0.2.
- Labels: E, B, C.

Approx. weight 0.25 g Dimensions in mm

Collector-emitter voltage
Collector-base voltage
Emitter-base voltage
Collector current
Junction temperature
Storage temperature range
Total power dissipation

$-V_{CE0}$	25	V
$-V_{CBS}$	30	V
$-V_{EBO}$	3	V
$-I_C$	50	mA
T_j	150	°C
T_{stg}	-50 to +150	°C
P_{tot}	160	mW

Junction to ambient air

 $R_{thJA} \quad | \quad < 600 \quad | \quad K/W$

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

Collector cutoff current

($-V_{CBO} = 20\text{ V}$) $-I_{CBO}$ <100 nA

DC power gain

($-I_C = 10\text{ mA}$; $-V_{CE} = 10\text{ V}$) h_{FE} >20 -Dynamic characteristics ($T_{amb} = 25^{\circ}\text{C}$)

Transition frequency

($-I_C = 10\text{ mA}$; $-V_{CE} = 10\text{ V}$; $f = 100\text{ MHz}$) f_T 1.6 GHz

Reverse transfer capacitance

($-V_{CE} = 1\text{ V}$; $f = 1\text{ MHz}$) C_{12b} 90 fF

Collector-base capacitance

($-V_{CB} = 10\text{ V}$; $f = 1\text{ MHz}$) $-C_{CBO}$ 0.55 pF

Noise figure

($-I_C = 10\text{ mA}$; $-V_{CB} = 10\text{ V}$; $f_M = 200\text{ MHz}$; $R_g = 60\ \Omega$) NF 3 dB

Noise figure

($-I_C = 10\text{ mA}$; $-V_{CB} = 10\text{ V}$; $f_M = 800\text{ MHz}$; $R_g = 60\ \Omega$) NF <4.5 dB

Power gain

($-I_C = 10\text{ mA}$; $-V_{CB} = 10\text{ V}$; $f_M = 800\text{ MHz}$; $R_L = 500\ \Omega$) G_{pb} 16.5 dBInterference voltage¹⁾($-I_C = 10\text{ mA}$; $-V_{CB} = 10\text{ V}$; $f_M = 200\text{ MHz}$; $R_g = 75\ \Omega$) $V_{int\ 1\%}$ 230 mVCollector current for G_{pbmax} ($-V_{CB} = 10\text{ V}$; $f_M = 800\text{ MHz}$; $R_L = 500\ \Omega$) I_C >10 mA

1) $V_{int\ 1\%}$ is the rms value of half the EMF of a 100% sine modulated TV carrier with $R_g = 75\ \Omega$, which causes 1% AM on the useful carrier.