

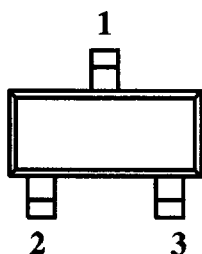
Silicon PNP HF Transistor

Applications

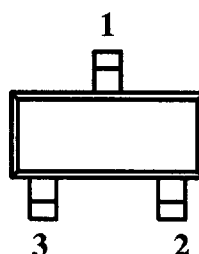
RF-IF amplifier specially for thick and thin film circuits.

Features

- High power gain
- Low noise figure



94 9280



95 10527

BF550 Marking: G2

Plastic case (SOT 23)

1= Collector; 2= Base; 3= Emitter

BF550R Marking: G5

Plastic case (SOT 23R)

1= Collector; 2= Base; 3= Emitter

Absolute Maximum Ratings

Parameters	Symbol	Value	Unit
Collector-base voltage	$-V_{CBO}$	40	V
Collector-emitter voltage	$-V_{CEO}$	40	V
Emitter-base voltage	$-V_{EBO}$	4	V
Collector current	$-I_C$	25	mA
Total power dissipation on ceramic substrat (7 x 5 x 0.6) mm ³ $T_{amb} \leq 60^\circ\text{C}$	P_{tot}	200	mW
Junction temperature	T_j	125	$^\circ\text{C}$

Maximum Thermal Resistance

Parameters	Symbol	Value	Unit
Junction ambient on ceramic substrat (7 x 5 x 0.6) mm ³	R_{thJA}	530	K/W

Electrical Characteristics

$T_{amb} = 25^{\circ}\text{C}$, unless otherwise specified

Parameters / Test Conditions	Symbol	Min.	Typ.	Max.	Unit
Collector cut-off current - $V_{CB} = 30\text{ V}$, $I_E = 0\text{ A}$	$-I_{CBO}$			50	nA
Base-emitter voltage - $V_{CE} = 10\text{ V}$, $-I_C = 1\text{ mA}$	$-V_{BE}$		750		mV
DC forward current transfer ratio - $V_{CE} = 10\text{ V}$, $-I_C = 1\text{ mA}$	h_{FE}	50			
Gain bandwidth product - $V_{CB} = 10\text{ V}$, $-I_C = 1\text{ mA}$, $f = 100\text{ MHz}$	f_T		350		MHz
Feedback capacitance - $V_{CB} = 10\text{ V}$, $-I_C = 1\text{ mA}$, $f = 100\text{ MHz}$	C_{re}		0.5		pF
Noise figure - $V_{CE} = 10\text{ V}$, $-I_C = 1\text{ mA}$, $R_G = 300\ \Omega$, $f = 200\text{ MHz}$	F_b		2		dB

Dimensions in mm

