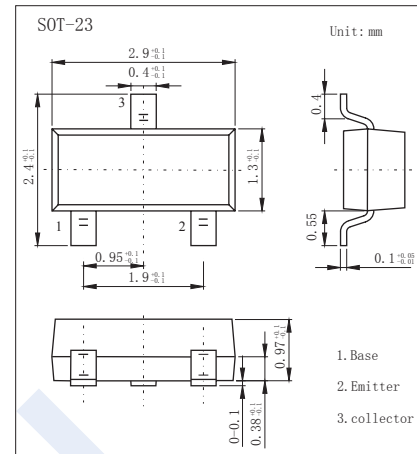


PNP Transistors

2SA1121

■ Features

- Low frequency amplifier
- Complementary pair with 2SC2618



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	-35	V
Collector to emitter voltage	V_{CEO}	-35	V
Emitter to base voltage	V_{EBO}	-4	V
Collector current	I_C	-500	mA
Collector power dissipation	P_C	150	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	$I_C = -100 \mu\text{A}, I_E = 0$	-35			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C = -1 \text{ mA}, I_B = 0$	-35			
Emitter - base breakdown voltage	V_{EBO}	$I_E = -100 \mu\text{A}, I_C = 0$	-4			
Collector-base cut-off current	I_{CBO}	$V_{CB} = -30 \text{ V}, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -4 \text{ V}, I_C = 0$			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -150 \text{ mA}, I_B = -15 \text{ mA}$		-0.2	-0.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -150 \text{ mA}, I_B = -15 \text{ mA}$			-1.2	
Base-emitter voltage	V_{BE}	$I_C = -10 \text{ mA}, V_{CE} = -3 \text{ V}$		-0.64		
DC current transfer ratio	h_{FE}	$I_C = -10 \text{ mA}, V_{CE} = -3 \text{ V}$	100		320	
		$I_C = -500 \text{ mA}, V_{CE} = -3 \text{ V}$	10			

■ $h_{FE}(1)$ Classification

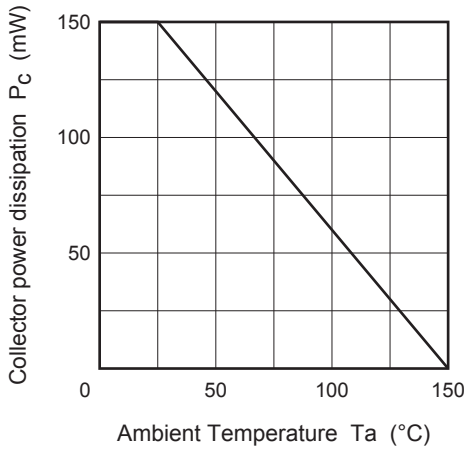
Marking	SC	SD
h_{FE}	100~200	160~320

PNP Transistors

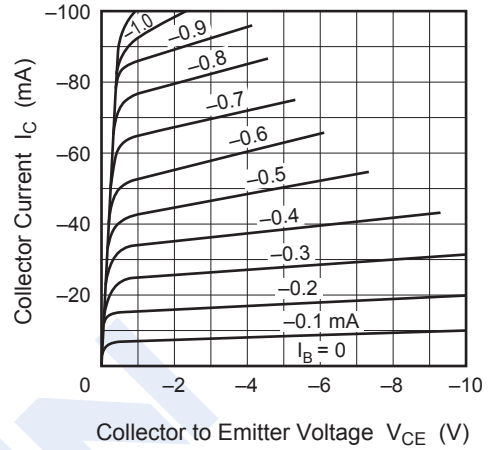
2SA1121

■ Typical Characteristics

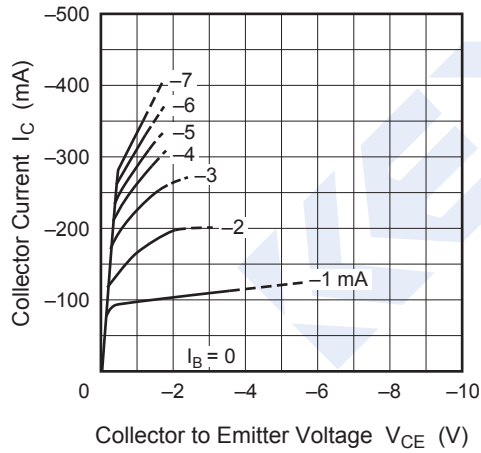
Maximum Collector Dissipation Curve



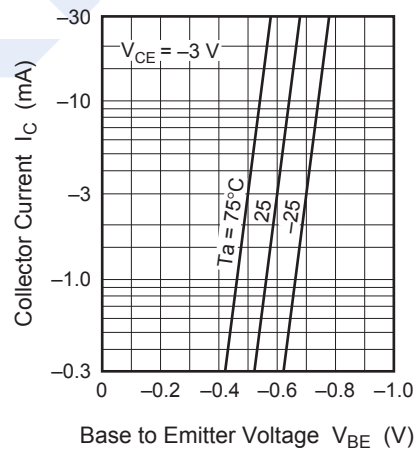
Typical Output Characteristics (1)



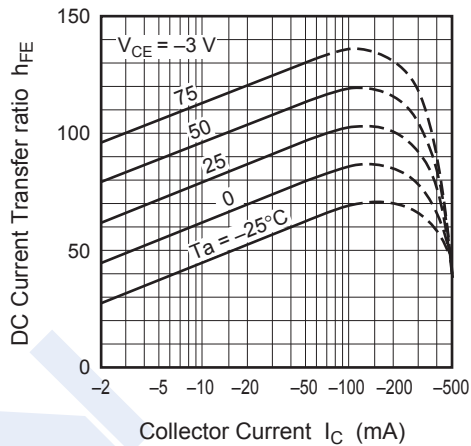
Typical Output Characteristics (2)



Typical Transfer Characteristics



DC Current Transfer Ratio vs. Collector Current



Gain Bandwidth Product vs. Collector Current

