
2SA1121

Silicon PNP Epitaxial

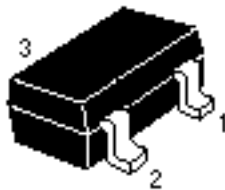
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Application

- Low frequency amplifier
- Complementary pair with 2SC2618

Outline

MPAK



1. Emitter
2. Base
3. Collector

2SA1121

Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Ratings	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	°C
Storage temperature	T_{stg}	-55 to +150	°C

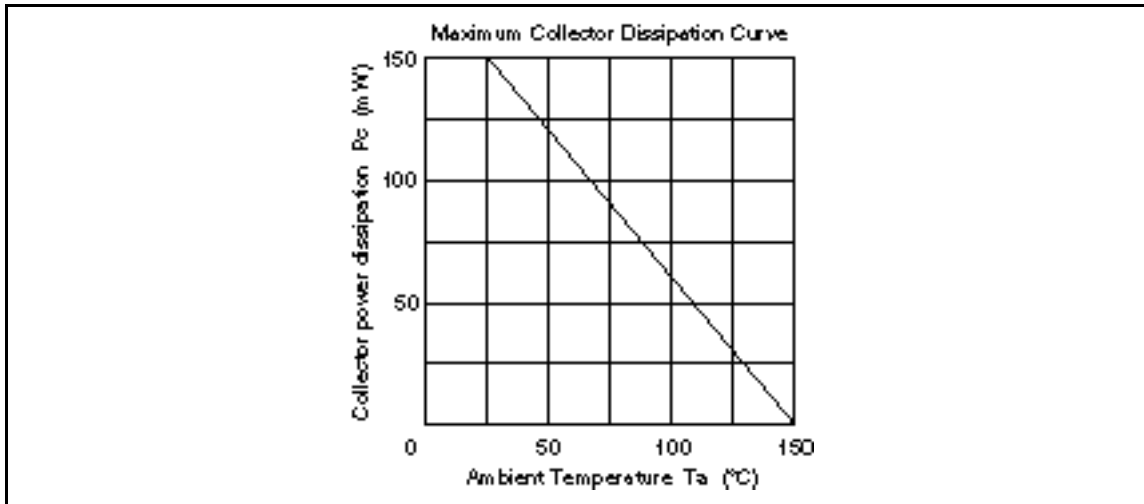
Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	-35	—	—	V	$I_C = -10 \mu A, I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	-35	—	—	V	$I_C = -1 \text{ mA}, R_{BE} =$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	-4	—	—	V	$I_E = -10 \mu A, I_C = 0$
Collector cutoff current	I_{CBO}	—	—	-0.5	μA	$V_{CB} = -20 \text{ V}, I_E = 0$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	-0.2	-0.6	V	$I_C = -150 \text{ mA}, I_B = -15 \text{ mA}$
DC current transfer ratio	h_{FE}^{*1}	60	—	320		$V_{CE} = -3 \text{ V}, I_C = -10 \text{ mA}$
	h_{FE}	10	—	—		$V_{CE} = -3 \text{ V}, I_C = -500 \text{ mA}$ (Pulse test)
Base to emitter voltage	V_{BE}	—	-0.64	—	V	$V_{CE} = -3 \text{ V}, I_C = -10 \text{ mA}$

Note: 1. The 2SA1121 is grouped by h_{FE} as follows.

Grade	B	C	D
Mark	SB	SC	SD
h_{FE}	60 to 120	100 to 200	160 to 320

See characteristic curves of 2SA673.



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