

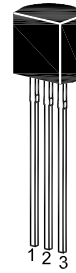
2SA1271

PNP Silicon Epitaxial Planar Transistor

for switching and AF amplifier applications.

The transistor is subdivided into two groups, O and Y according to its DC current gain.

On special request, these transistors can be manufactured in different pin configurations.



1. Emitter 2. Collector 3. Base
TO-92 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{\text{CBO}}$	35	V
Collector Emitter Voltage	$-V_{\text{CEO}}$	30	V
Emitter Base Voltage	$-V_{\text{EBO}}$	5	V
Collector Current	$-I_{\text{C}}$	800	mA
Emitter Current	I_{E}	800	mA
Power Dissipation	P_{tot}	600	mW
Junction Temperature	T_{j}	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $-V_{\text{CE}} = 1\text{ V}$, $-I_{\text{C}} = 100\text{ mA}$ Current Gain Group O Y at $-V_{\text{CE}} = 1\text{ V}$, $-I_{\text{C}} = 700\text{ mA}$	h_{FE}	100	-	200	-
	h_{FE}	160	-	320	-
	h_{FE}	35	-	-	-
	h_{FE}	-	-	-	-
Collector Base Cutoff Current at $-V_{\text{CB}} = 35\text{ V}$	$-I_{\text{CBO}}$	-	-	0.1	μA
Emitter Base Cutoff Current at $-V_{\text{EB}} = 5\text{ V}$	$-I_{\text{EBO}}$	-	-	0.1	μA
Collector Emitter Breakdown Voltage at $-I_{\text{C}} = 10\text{ mA}$	$-V_{\text{CEO}}$	30	-	-	V
Collector Emitter Saturation Voltage at $-I_{\text{C}} = 500\text{ mA}$, $-I_{\text{B}} = 20\text{ mA}$	$-V_{\text{CE(sat)}}$	-	-	0.7	V
Base Emitter Voltage at $-I_{\text{C}} = 10\text{ mA}$, $-V_{\text{CE}} = 1\text{ V}$	$-V_{\text{BE}}$	0.5	-	0.8	V
Transition Frequency at $-V_{\text{CE}} = 5\text{ V}$, $-I_{\text{C}} = 10\text{ mA}$	f_{T}	-	120	-	MHz
Collector Output Capacitance at $-V_{\text{CB}} = 10\text{ V}$, $f = 1\text{ MHz}$	C_{ob}	-	19	-	pF

