

## 2SA1270 PNP Silicon Epitaxial Planar Transistor

for switching and general purpose 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  
Weight approx. 0.19g

### 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	$-I_{\text{C}}$	500	mA
Base Current	$-I_{\text{B}}$	100	mA
Power Dissipation	$P_{\text{tot}}$	500	mW
Junction Temperature	$T_{\text{j}}$	150	$^{\circ}\text{C}$
Storage Temperature Range	$T_{\text{s}}$	-55 to +150	$^{\circ}\text{C}$



### Characteristics at $T_{amb}=25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $-V_{CE}=1\text{V}$ , $-I_C=100\text{mA}$					
Current Gain Group O	$h_{FE}$	70	-	140	-
Y	$h_{FE}$	120	-	240	-
at $-V_{CE}=6\text{V}$ , $-I_C=400\text{mA}$					
O	$h_{FE}$	25	-	-	-
Y	$h_{FE}$	40	-	-	-
Collector Cutoff Current at $-V_{CB}=35\text{V}$	$-I_{CBO}$	-	-	0.1	$\mu\text{A}$
Emitter Cutoff Current at $-V_{EB}=5\text{V}$	$-I_{EBO}$	-	-	0.1	$\mu\text{A}$
Collector Emitter Saturation Voltage at $-I_C=100\text{mA}$ , $-I_B=10\text{mA}$	$-V_{CEsat}$	-	0.1	0.25	V
Base Emitter Voltage at $-V_{CE}=1\text{V}$ , $-I_C=100\text{mA}$	$-V_{BE}$	-	0.8	1.0	V
Transition Frequency at $-V_{CE}=6\text{V}$ , $-I_C=20\text{mA}$	$f_T$	-	200	-	MHz
Collector Output Capacitance at $-V_{CB}=6\text{V}$ , $f=1\text{MHz}$	$C_{OB}$	-	13	-	pF