

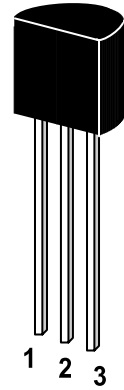
ST 2SA1271

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.

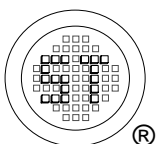
On special request, these transistors can be manufactured in different pin configurations.



1. Emitter 2. Collector 3. Base
TO-92 Plastic Package
Weight approx. 0.19g

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

	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_{S}	-55 to +150	$^\circ\text{C}$



SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)

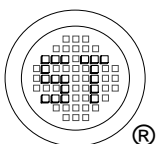


Dated : 07/12/2002

ST 2SA1271

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

	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}	100	-	200	-
Y	h_{FE}	160	-	320	-
at $-V_{CE}=1\text{V}$, $-I_C=700\text{mA}$	h_{FE}	35	-	-	-
Collector Cutoff Current at $-V_{CB}=35\text{V}$	$-I_{CBO}$	-	-	0.1	μA
Emitter Cutoff Current at $-V_{EB}=5\text{V}$	$-I_{EBO}$	-	-	0.1	μA
Collector Emitter Saturation Voltage at $-I_C=500\text{mA}$, $-I_B=20\text{mA}$	$-V_{CE(sat)}$	-	-	0.7	V
Transition Frequency at $-V_{CE}=5\text{V}$, $-I_C=10\text{mA}$	f_T	-	120	-	MHz
Base Emitter Voltage at $-I_C=10\text{mA}$, $-V_{CE}=1\text{V}$	$-V_{BE}$	0.5	-	0.8	V
Collector Output Capacitance at $-V_{CB}=10\text{V}$, $f=1\text{MHz}$	C_{OB}	-	19	-	pF
Collector Emitter Breakdown Voltage at $-I_C=10\text{mA}$	$-V_{CEO}$	30	-	-	V



SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



Dated : 07/12/2002