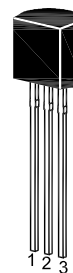


ST 2SA1271

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.



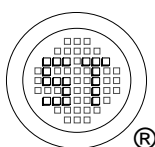
1. Emitter 2. Collector 3. Base
TO-92 Plastic Package

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

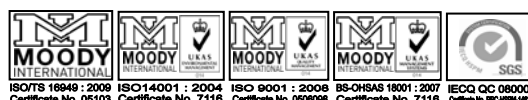
Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CB0}$	35	V
Collector Emitter Voltage	$-V_{CEO}$	30	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	800	mA
Emitter Current	I_E	800	mA
Power Dissipation	P_{tot}	600	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

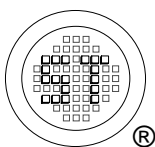
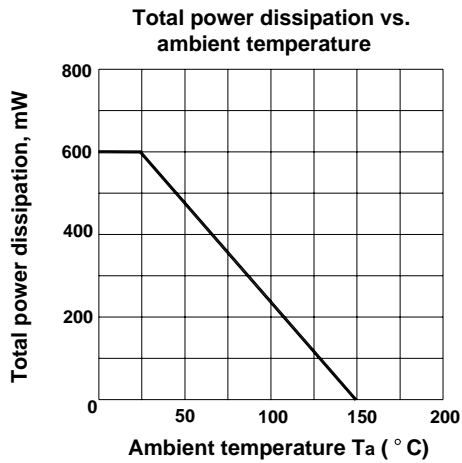
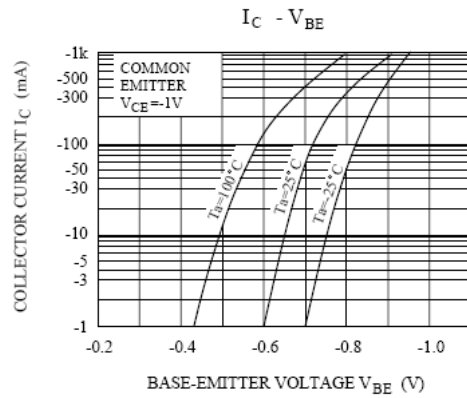
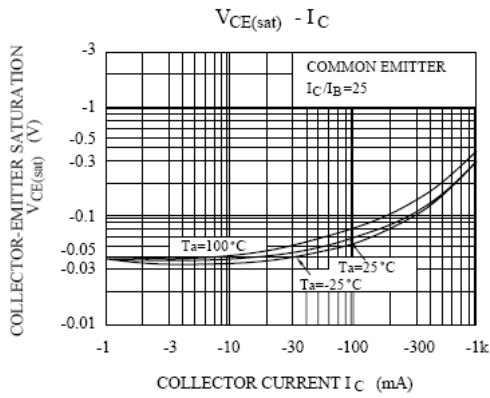
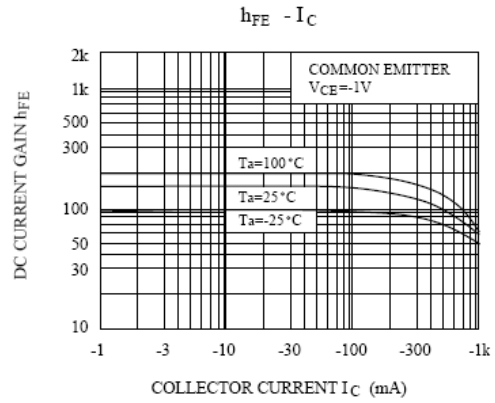
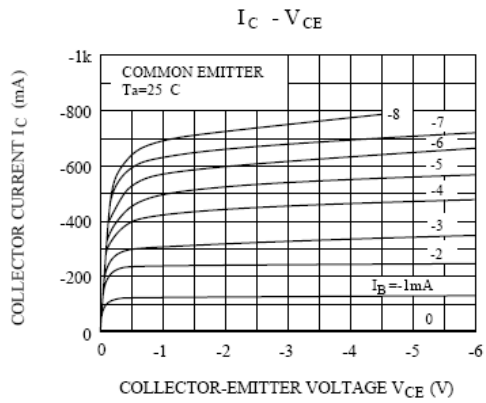
Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $-V_{CE} = 1\text{ V}$, $-I_C = 100\text{ mA}$ Current Gain Group O Y	h_{FE}	100	-	200	-
	h_{FE}	160	-	320	-
	h_{FE}	35	-	-	-
at $-V_{CE} = 1\text{ V}$, $-I_C = 700\text{ mA}$					
Collector Base Cutoff Current at $-V_{CB} = 35\text{ V}$	$-I_{CB0}$	-	-	0.1	μA
Emitter Base Cutoff Current at $-V_{EB} = 5\text{ V}$	$-I_{EBO}$	-	-	0.1	μA
Collector Emitter Breakdown Voltage at $-I_C = 10\text{ mA}$	$-V_{CEO}$	30	-	-	V
Collector Emitter Saturation Voltage at $-I_C = 500\text{ mA}$, $-I_B = 20\text{ mA}$	$-V_{CE(sat)}$	-	-	0.7	V
Base Emitter Voltage at $-I_C = 10\text{ mA}$, $-V_{CE} = 1\text{ V}$	$-V_{BE}$	0.5	-	0.8	V
Transition Frequency at $-V_{CE} = 5\text{ V}$, $-I_C = 10\text{ mA}$	f_T	-	120	-	MHz
Collector Output Capacitance at $-V_{CB} = 10\text{ V}$, $f = 1\text{ MHz}$	C_{ob}	-	19	-	pF



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