

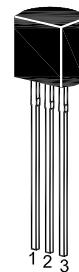
# ST 2SA1266

## PNP Silicon Epitaxial Planar Transistor

for switching and AF amplifier applications.

The transistor is subdivided into three groups, O, Y and G 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	$-V_{CBO}$	50	V
Collector Emitter Voltage	$-V_{CEO}$	50	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	150	mA
Base Current	$-I_B$	50	mA
Power Dissipation	$P_{tot}$	500	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.	Max.	Unit
DC Current Gain at $-V_{CE} = 6 \text{ V}$ , $-I_C = 2 \text{ mA}$	$h_{FE}$	70	140	-
Current Gain Group O Y G	$h_{FE}$ $h_{FE}$ $h_{FE}$ $h_{FE}$	120 200 400 25	240 400 - -	- - - -
at $-V_{CE} = 6 \text{ V}$ , $-I_C = 150 \text{ mA}$				
Collector Base Cutoff Current at $-V_{CB} = 50 \text{ V}$	$-I_{CBO}$	-	0.1	$\mu\text{A}$
Emitter Base Cutoff Current at $-V_{EB} = 5 \text{ V}$	$-I_{EBO}$	-	0.1	$\mu\text{A}$
Collector Emitter Saturation Voltage at $-I_C = 100 \text{ mA}$ , $-I_B = 10 \text{ mA}$	$-V_{CE(sat)}$	-	0.3	V
Base Emitter Saturation Voltage at $-I_C = 100 \text{ mA}$ , $-I_B = 10 \text{ mA}$	$-V_{BE(sat)}$	-	1.1	V
Transition Frequency at $-V_{CE} = 10 \text{ V}$ , $-I_C = 1 \text{ mA}$	$f_T$	80	-	MHz
Collector Output Capacitance at $-V_{CB} = 10 \text{ V}$ , $f = 1 \text{ MHz}$	$C_{ob}$	-	7	pF
Noise Figure at $-V_{CE} = 6 \text{ V}$ , $-I_C = 0.1 \text{ V}$ , $f = 1 \text{ KHz}$ , $R_G = 10 \text{ k}\Omega$	NF	-	10	dB

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