



**FUKUCOM COMPANY LTD.**

**福 靈 有 限 公 司**

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,  
KWUN TONG, KOWLOON, HONG KONG.

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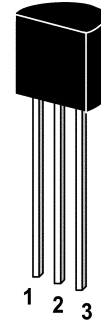
## ST 2N2907 / 2N2907A

### PNP Silicon Epitaxial Planar Transistor

for switching and AF amplifier applications.

The transistor is subdivided into one group according to its DC current gain. As complementary type the NPN transistor ST 2N2222 and ST 2N2222A are recommended.

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

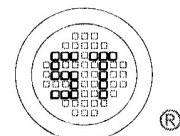


1. Emitter 2. Base 3. Collector

TO-92 Plastic Package  
Weight approx. 0.19g

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

Parameter	Symbol	Value		Unit
		ST 2N2907	ST 2N2907A	
Collector Base Voltage	$-V_{CBO}$	60		V
Collector Emitter Voltage	$-V_{CEO}$	40	60	V
Emitter Base Voltage	$-V_{EBO}$	5		V
Collector Current	$-I_C$	600		mA
Power Dissipation	$P_{tot}$	625		mW
Junction Temperature	$T_j$	150		$^\circ\text{C}$
Storage Temperature Range	$T_s$	-55 to +150		$^\circ\text{C}$



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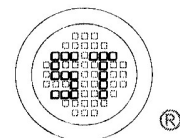
Dated : 23/12/2005

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**ST 2N2907 / 2N2907A****Characteristics at  $T_a = 25^\circ\text{C}$** 

Parameter		Symbol	Min.	Max.	Unit	
DC Current Gain	at $-I_C = 0.1\text{ mA}$ , $-V_{CE} = 10\text{ V}$	ST 2N2907	$h_{FE}$	35	-	-
		ST 2N2907A	$h_{FE}$	75	-	-
	at $-I_C = 1\text{ mA}$ , $-V_{CE} = 10\text{ V}$	ST 2N2907	$h_{FE}$	50	-	-
		ST 2N2907A	$h_{FE}$	100	-	-
	at $-I_C = 10\text{ mA}$ , $-V_{CE} = 10\text{ V}$	ST 2N2907	$h_{FE}$	75	-	-
		ST 2N2907A	$h_{FE}$	100	-	-
	at $-I_C = 150\text{ mA}$ , $-V_{CE} = 10\text{ V}$		$h_{FE}$	100	300	-
	at $-I_C = 500\text{ mA}$ , $-V_{CE} = 10\text{ V}$	ST 2N2907	$h_{FE}$	30	-	-
	ST 2N2907A	$h_{FE}$	50	-	-	
Collector Cutoff Current	at $-V_{CB} = 50\text{ V}$	ST 2N2907	$-I_{CBO}$	-	20	nA
		ST 2N2907A	$-I_{CBO}$	-	10	nA
Collector Base Breakdown Voltage	at $-I_C = 10\text{ }\mu\text{A}$		$-V_{(BR)CBO}$	60	-	V
Collector Emitter Breakdown Voltage	at $-I_C = 10\text{ mA}$	ST 2N2907	$-V_{(BR)CEO}$	40	-	V
		ST 2N2907A	$-V_{(BR)CEO}$	60	-	V
Emitter Base Breakdown Voltage	at $-I_E = 10\text{ }\mu\text{A}$		$-V_{(BR)EBO}$	5	-	V
Collector Saturation Voltage	at $-I_C = 150\text{ mA}$ , $-I_B = 15\text{ mA}$		$-V_{CE(sat)}$	-	0.4	V
	at $-I_C = 500\text{ mA}$ , $-I_B = 50\text{ mA}$		$-V_{CE(sat)}$	-	1.6	V
Base Saturation Voltage	at $-I_C = 150\text{ mA}$ , $-I_B = 15\text{ mA}$		$-V_{BE(sat)}$	-	1.3	V
	at $-I_C = 500\text{ mA}$ , $-I_B = 50\text{ mA}$		$-V_{BE(sat)}$	-	2.6	V
Gain Bandwidth Product	at $-I_C = 50\text{ mA}$ , $-V_{CE} = 20\text{ V}$ , $f = 100\text{ MHz}$		$f_T$	200	-	MHz
Collector Output Capacitance	at $-V_{CB} = 10\text{ V}$ , $f = 1\text{ MHz}$		$C_{ob}$	-	8	pF
Input Capacitance	at $-V_{BE} = 2\text{ V}$ , $f = 1\text{ MHz}$		$C_{ib}$	-	30	pF

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