

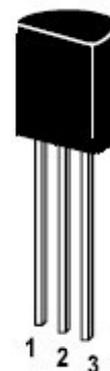
## 2SA1206 PNP Silicon Epitaxial Planar Transistor

for general purpose amplifier and high speed switching applications.

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

### Features

- High frequency current gain
- High speed switching
- Small output capacitance
- Low collector saturation voltage



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	$-V_{CBO}$	15	V
Collector Emitter Voltage	$-V_{CEO}$	15	V
Emitter Base Voltage	$-V_{EBO}$	4.5	V
Collector Current (D.C.)	$-I_C$	50	mA
Collector Current (Pulse)*	$-I_C$	100	mA
Power Dissipation	$P_{tot}$	600	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_s$	-55 to +150	$^\circ\text{C}$

\* $PW \leq 2\text{ms}$ , Duty Cycle  $\leq 50\%$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain*					
at $-V_{CE}=1V, -I_C=10mA$	$h_{FE}$	50	80	150	-
at $-V_{CE}=1V, -I_C=1mA$	$h_{FE}$	30	70	-	-
Collector Cutoff Current					
at $-V_{CB}=8V$	$-I_{CBO}$	-	-	0.1	$\mu A$
Emitter Cutoff Current					
at $-V_{EB}=3V$	$-I_{EBO}$	-	-	0.1	$\mu A$
Collector Saturation Voltage*					
at $-I_C=10mA, -I_B=1mA$	$-V_{CE(sat)}$	-	0.09	0.2	V
Base Saturation Voltage*					
at $-I_C=10mA, -I_B=1mA$	$-V_{BE(sat)}$	-	0.8	0.95	V
Turn-on Time					
See test circuit	$t_{on}$	-	9	20	ns
Storage Time					
See test circuit	$t_{stg}$	-	16	40	ns
Turn-off Time					
See test circuit	$t_{off}$	-	19	40	ns
Gain Bandwidth Product					
at $-V_{CE}=10V, I_E=10mA, f=100MHz$	$f_T$	800	1800	-	MHz
Output Capacitance					
at $-V_{CB}=5V, f=1MHz$	$C_{OB}$	-	2	3	pF

\*Pulsed  $PW \leq 350\mu s$ , Duty Cycle  $\leq 2\%$