

## 2SA950 PNP Silicon Epitaxial Planar Transistor

for audio power amplifier applications.

The transistor is subdivided into two group, 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 ( $T_a=25^{\circ}\text{C}$ )

Parameter	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
Base Current	$-I_{\text{B}}$	160	mA
Power Dissipation	$P_{\text{tot}}$	600	mW
Junction Temperature	$T_{\text{j}}$	150	$^{\circ}\text{C}$
Storage Temperature Range	$T_{\text{s}}$	-55 to +150	$^{\circ}\text{C}$

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

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

