



Shantou Huashan Electronic Devices Co.,Ltd.

PNP SILICON TRANSISTOR

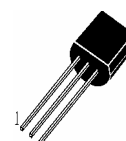
H928S

AUDIO POWER AMPLIFIER APPLICATIONS

ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

T_{stg}	Storage Temperature	-55~150°C
T_j	Junction Temperature	150°C
P_C	Collector Dissipation	750mW
V_{CBO}	Collector-Base Voltage	-30V
V_{CEO}	Collector-Emitter Voltage	-30V
V_{EBO}	Emitter-Base Voltage	-5V
I_C	Collector Current	-2A

TO-92



1—Emitter, E
2—Collector, C
3—Base, B

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV_{CBO}	Collector-Base Breakdown Voltage	-30			V	$I_C=-100\ \mu\text{A}, I_E=0$
BV_{CEO}	Collector-Emitter Breakdown Voltage	-30			V	$I_C=-10\text{mA}, I_B=0$
BV_{EBO}	Emitter-Base Breakdown Voltage	5			V	$I_E=-1\text{mA}, I_C=0$
I_{CBO}	Collector Cut-off Current			-100	nA	$V_{CB}=-30\text{V}, I_E=0$
I_{EBO}	Emitter-Base Cut-off Current			-100	nA	$V_{EB}=-5\text{V}, I_C=0$
h_{FE}	DC Current Gain	100		320		$V_{CE}=-2\text{V}, I_C=-500\text{mA}$
$V_{CE(sat)}$	Collector- Emitter Saturation Voltage			-2	V	$I_C=-1.5\text{mA}, I_B=-30\text{mA}$
$V_{BE(ON)}$	Base-Emitter On Voltage			-1	V	$V_{CE}=-2\text{V}, I_C=-500\text{mA}$
f_T	Current Gain-Bandwidth Product		120		MHz	$V_{CE}=-2\text{V}, I_C=-500\text{mA}$
C_{ob}	Collector-Base Capacitance		48		pF	$V_{CB}=-10\text{V}, I_E=0, F=1\text{MHz}$

h_{FE} Classification

O

Y

100—200

160—320

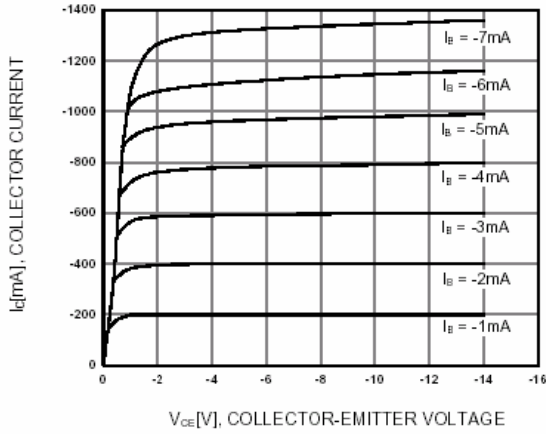


Figure 1. Static Characteristic

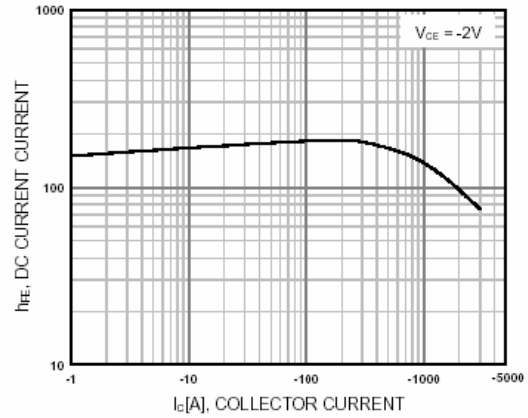


Figure 2. DC current Gain

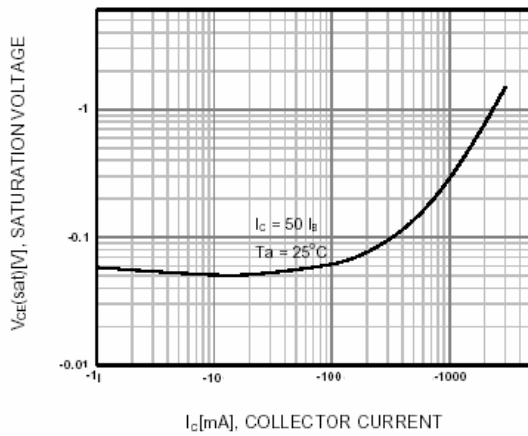


Figure 3. Collector-Emitter Saturation Voltage

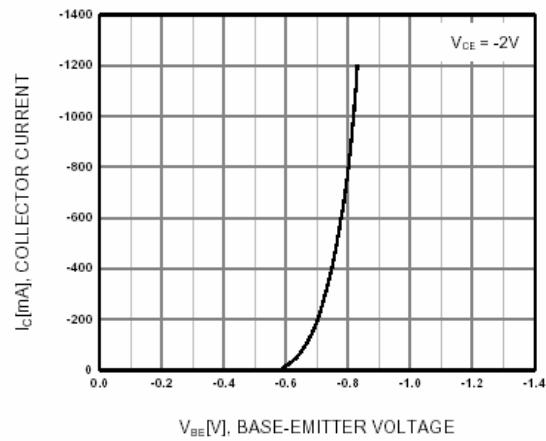


Figure 4. Base-Emitter On Voltage

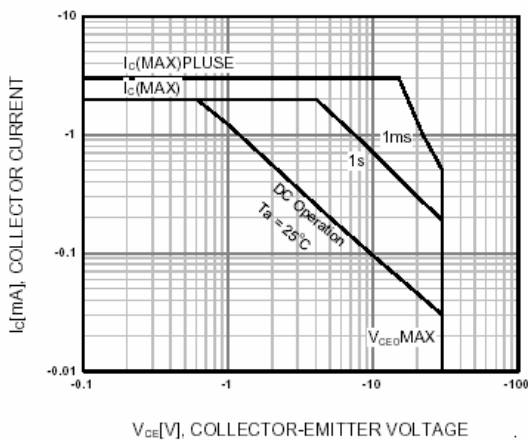


Figure 5. Safe Operating Area

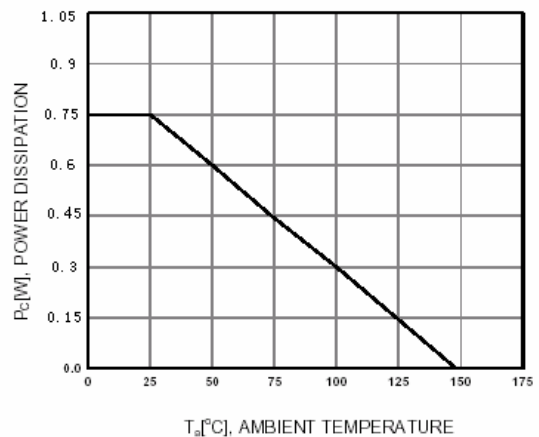


Figure 6. Power Derating