Shantou Huashan Electronic Devices Co.,Ltd.

NPN SILICON TRANSISTOR

HD880

APPLICATIONS

Low Frequency Power Amplifier.

ABSOLUTE MAXIMUM RATINGS（T_a=25℃）

T_{stg}——Storage Temperature…… −55~150℃

T_j——Junction Temperature…… 150℃

P_C——Collector Dissipation（T_c=25℃）…… 30W

V_{CBO}——Collector-Base Voltage……60V

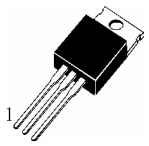
V_{CEO}——Collector-Emitter Voltage…… 60V

V_{EBO}——Emitter-Base Voltage…… 7V

I_C——Collector Current…… 3A

Ib——Base Current……0.3A

TO-220



1－Base，B
2－Collector，C
3－Emitter, E

ELECTRICAL CHARACTERISTICS（T_a=25℃）

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV_{CEO}	Collector-Emitter Breakdown Voltage	60			V	I_C=50mA, I_B=0
I_{CBO}	Collector Cut-off Current			100	μA	V_{CB}=60V, I_E=0
I_{EBO}	Emitter Cut-off Current			100	μA	V_{EB}=7V, I_C=0
H_{FE}（1）	DC Current Gain	60		300		V_{CE}=5V, I_C=0.5A
H_{FE}（2）	DC Current Gain	20				V_{CE}=5V, I_C=3A
$V_{CE(sat)}$	Collector- Emitter Saturation Voltage		0.4	1	V	I_C=3A, I_B=0.3A
$V_{BE(on)}$	Base-Emitter On Voltage		0.7	1	V	V_{CE}=5V, I_C=0.5A
ft	Current Gain-Bandwidth Product		3		MHz	V_{CE}=5V, I_C=0.5A,
Cob	Output Capacitance		70		pF	V_{CB}=10V, I_E=0， f=1MHz
t_{ON}	Turn-On Time		0.8		μS	I_{B1}= -I_{B2}=0.2A V_{CC}=30V
t_{STG}	Storage Time		1.5		μS	
t_F	Fall Time		0.8		μS	

h_{FE} Classification

O	Y	GR
60—120	100—200	150—300

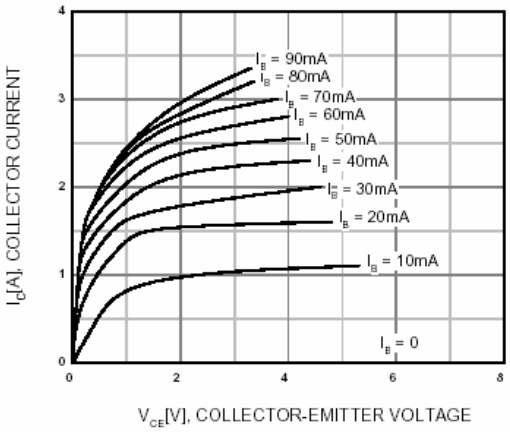


Figure 1. Static Characteristic

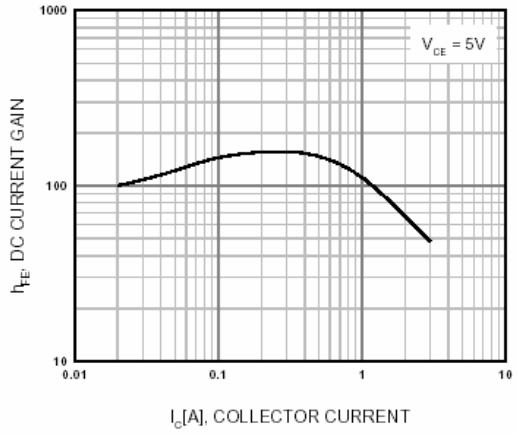


Figure 2. DC current Gain

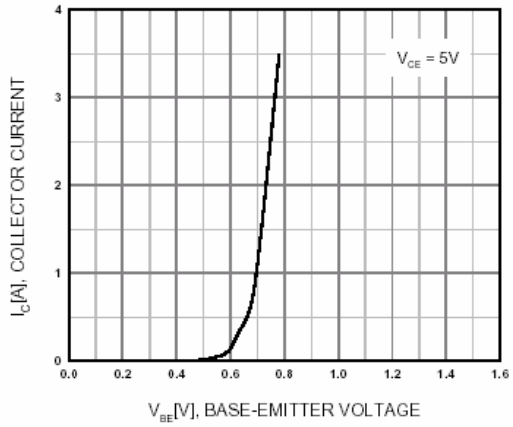


Figure 3. Base-Emitter On Voltage

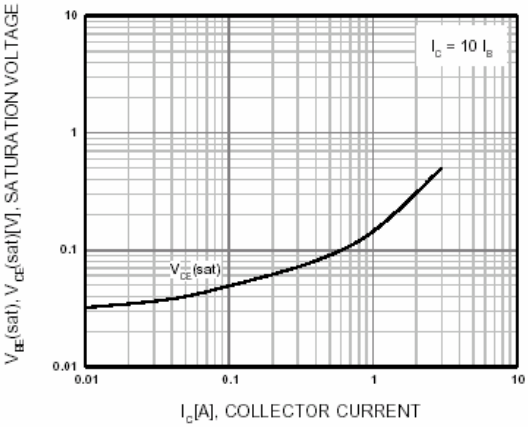


Figure 4. Collector-Emitter Saturation Voltage vs Collector Current

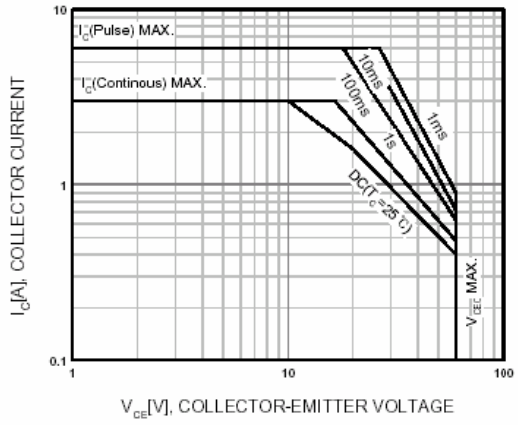


Figure 5. Safe Operating Area

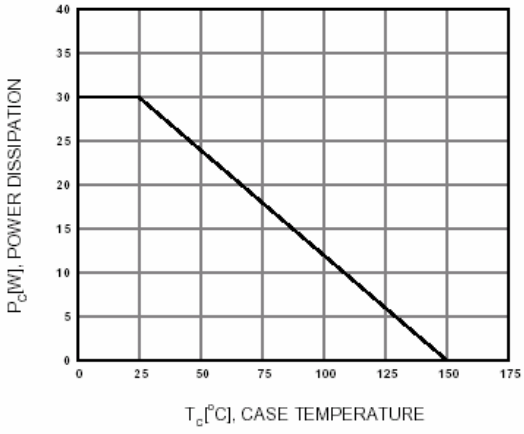


Figure 6. Power Derating