Shantou Huashan Electronic Devices Co.,Ltd.

NPN SILICON TRANSISTOR

H945

APPLICATIONS

The H945 is designed for driver stage of AF amplifier
And low speed switching.

ABSOLUTE MAXIMUM RATINGS（T_a=25℃）

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

T_j——Junction Temperature……150℃

P_C——Collector Dissipation……250mW

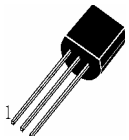
V_{CBO}——Collector-Base Voltage……60V

V_{CEO}——Collector-Emitter Voltage……50V

V_{EBO}——Emitter-Base Voltage……5V

I_C——Collector Current……150mA

TO-92



1—Emitter，E
2—Collector，C
3—Base，B

ELECTRICAL CHARACTERISTICS（T_a=25℃）

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV_{CBO}	Collector-Base Breakdown Voltage	60			V	I_C=100μA, I_E=0
BV_{CEO}	Collector-Emitter Breakdown Voltage	50			V	I_C=100μA, I_B=0
BV_{EBO}	Emitter-Base Breakdown Voltage	5			V	I_E=100μA，I_C=0
H_{FE}	DC Current Gain	90		600		V_{CE}=6V, I_C=1mA
$V_{CE(sat)}$	Collector- Emitter Saturation Voltage			0.3	V	I_C=100mA, I_B=10mA
$V_{BE(sat)}$	Base-Emitter Saturation Voltage			1.0	V	I_C=100mA, I_B=10mA
I_{CBO}	Collector Cut-off Current			100	nA	V_{CB}=60V, I_E=0
I_{EBO}	Emitter Cut-off Current			100	nA	V_{EB}=5V, I_C=0
f_T	Current Gain-Bandwidth Product		250		MHz	V_{CE}=6V, I_C=10mA
Cob	Output Capacitance		3.0		pF	V_{CB}=6V, I_E=0，f=1MHz
NF	Noise Figure		4.0		dB	V_{CE}=6V, I_C=0.5mA, f=1KHz, Rs=500Ω

h_{FE} Classification

R	Q	P	K
90—180	135—270	200—400	300—600

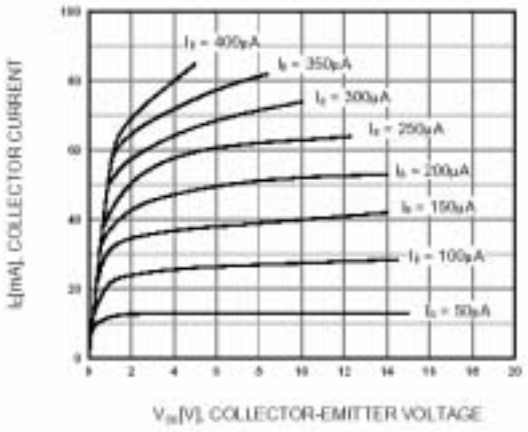


Figure 1. Static Characteristic

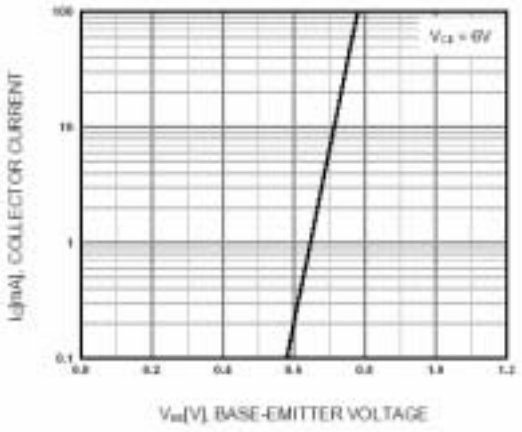


Figure 2. Transfer Characteristic

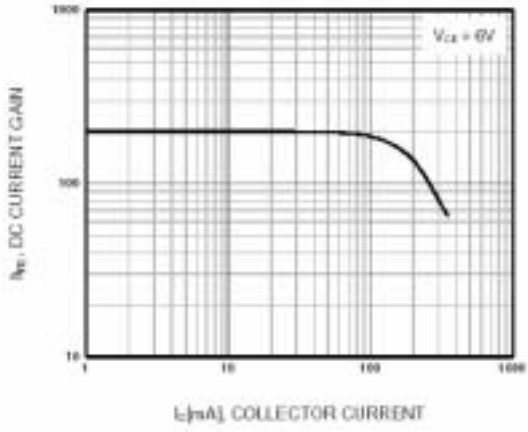


Figure 3. DC current Gain

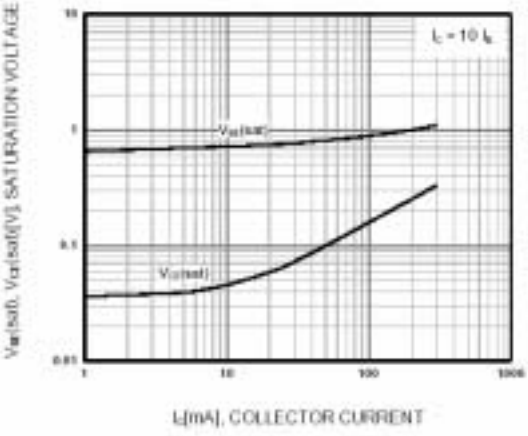


Figure 4. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

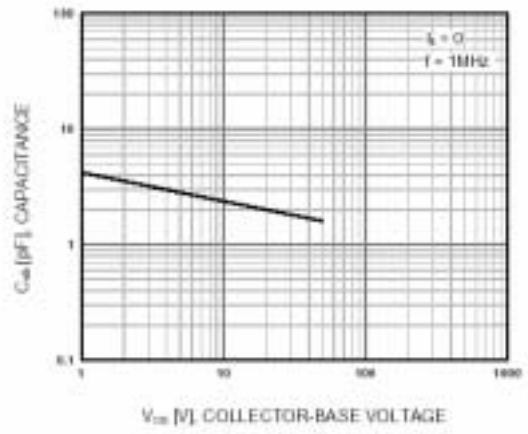


Figure 5. Output Capacitance

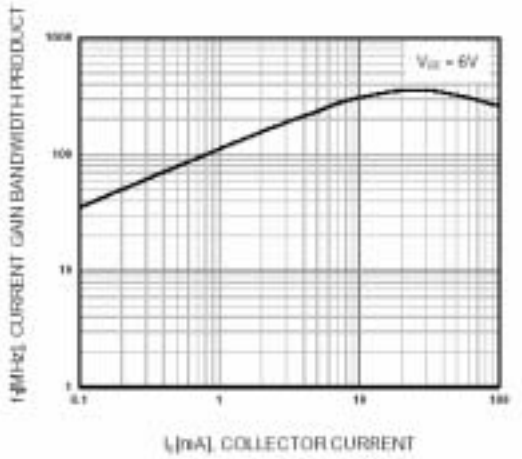


Figure 6. Current Gain Bandwidth Product