Shantou Huashan Electronic Devices Co.,Ltd.

H8050

NPN EPITAXIAL SILICON TRANSISTOR

2W OUTPUT AMPLIFIER OF PORTABLE RADIOS IN CLASS
B PUSH-PULL OPERATION.

ABSOLUTE MAXIMUM RATINGS（T_a=25℃）

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

T_j——Juncttion Temperature……150℃

P_C——Collector Dissipation……1W

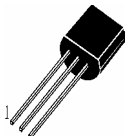
V_{CBO}——Collector-Base Voltage……40V

V_{CEO}——Collector-Emitter Voltage……25V

V_{EBO}——Emitter-Base Voltage……6V

I_C——Collector Current……1.5A

TO-92



1－Emitter，E
2－Base，B
3－Collector，C

ELECTRICAL CHARACTERISTICS（T_a=25℃）

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
I_{CBO}	Collector Cut-off Current			0.1	μA	V_{CB}=35V, I_E=0
I_{EBO}	Emitter Cut-off Current			0.1	μA	V_{EB}=6V, I_C=0
H_{FE}	DC Current Gain	85		500		V_{CE}=1V, I_C=100mA
		40				V_{CE}=1V, I_C=800mA
V_{BE}	Base- Emitter Voltage			1	V	V_{CE}=1V, I_C=10mA
$V_{CE(sat)}$	Collector- Emitter Saturation Voltage			0.5	V	I_C=800mA, I_B=80mA
$V_{BE(sat)}$	Base- Emitter Saturation Voltage			1.2	V	I_C=800mA,I_B=80mA
BV_{CBO}	Collector-Base Breakdown Voltage	40			V	I_C=100μA，I_E=0
BV_{CEO}	Collector-Emitter Breakdown Voltage	25			V	I_C=2mA，I_B=0
BV_{EBO}	Emitter- Base Breakdown Voltage	6			V	I_E=100μA，I_C=0
Cob	Output Capacacitance		9.0		pF	V_{CB}=10V,I_E=0，f=1MHz
f_T	Current Gain-Bandwidth Product	100			MHz	V_{CE}=10V, I_C=50mA

h_{FE} Classification

B	C	D	E
85—160	120—200	160—300	270—500

Typical Characteristics

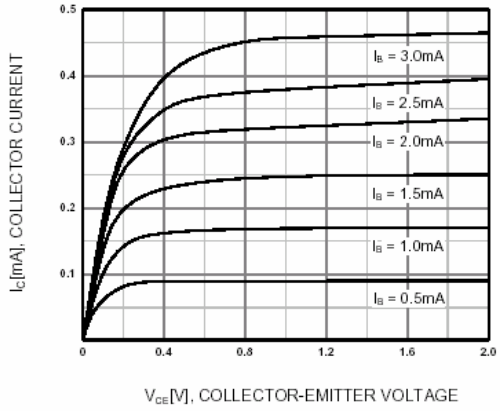


Figure 1. Static Characteristic

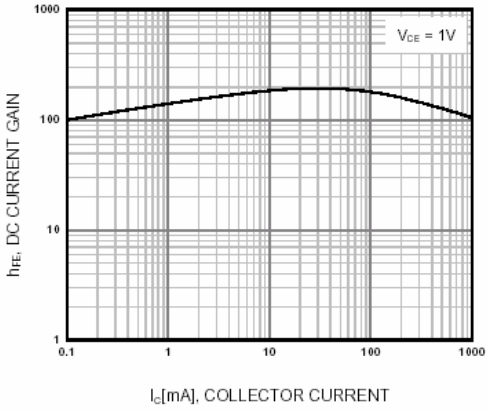


Figure 2. DC current Gain

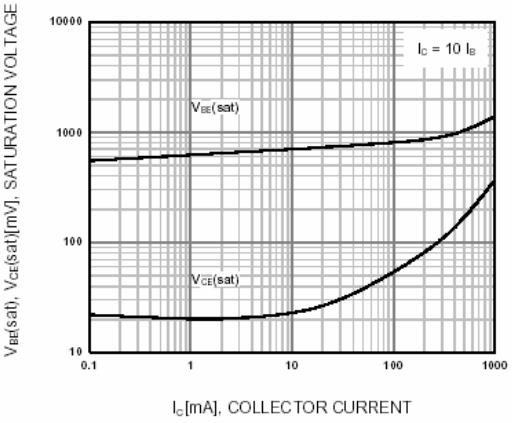


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

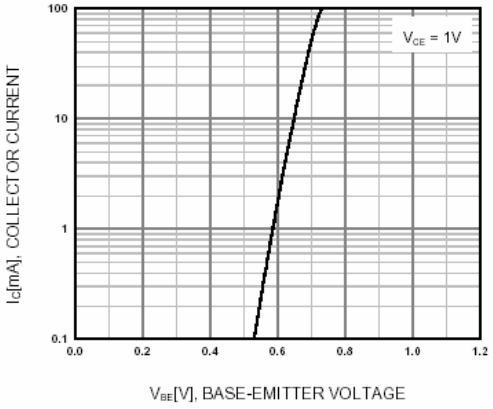


Figure 4. Base-Emitter On Voltage

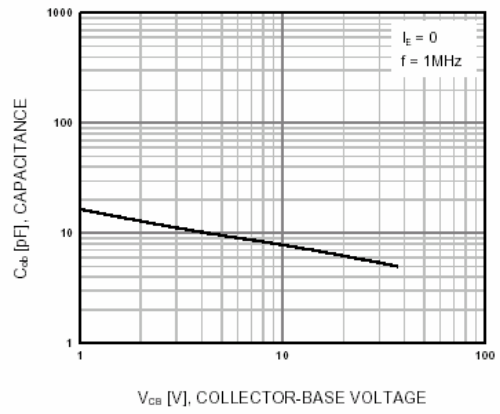


Figure 5. Collector Output Capacitance

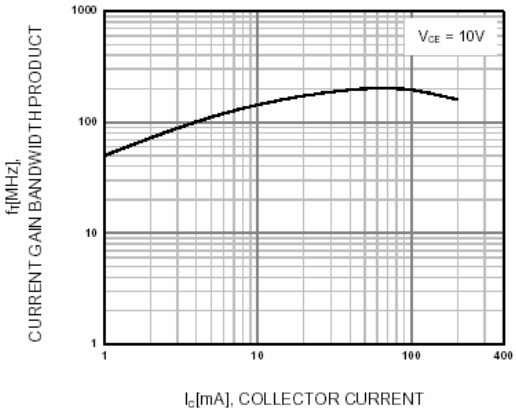


Figure 6. Current Gain Bandwidth Product