



Shantou Huashan Electronic Devices Co., Ltd.

NPN SILICON TRANSISTOR

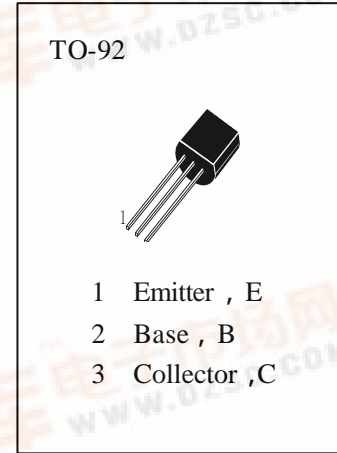
H9018

APPLICATIONS

**AM/FM AMPLIFIER , LOCAL OSCILLATOR
OF FM/VHF TUNER**

ABSOLUTE MAXIMUM RATINGS ($T_a=25$)

- T_{stg} —Storage Temperature..... -55~150
- T_j —Junction Temperature.....150
- P_C —Collector Dissipation.....400mW
- V_{CBO} —Collector-Base Voltage.....30V
- V_{CEO} —Collector-Emitter Voltage.....15V
- V_{EBO} —Emitter-Base Voltage.....5V
- I_C —Collector Current.....50mA



ELECTRICAL CHARACTERISTICS ($T_a=25$)

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
I_{CBO}	Collector Cut-off Current			0.05	μA	$V_{CB}=12V, I_E=0$
h_{FE}	DC Current Gain	54		198		$V_{CE}=5V, I_C=1mA$
$V_{CE(sat)}$	Collector- Emitter Saturation Voltage			0.5	V	$I_C=10mA, I_B=1mA$
BV_{CBO}	Collector-Base Breakdown Voltage	30			V	$I_C=100\mu A, I_E=0$
BV_{CEO}	Collector-Emitter Breakdown Voltage	15			V	$I_C=1mA, I_B=0$
BV_{EBO}	Emitter-Base Breakdown Voltage	5			V	$I_E=100\mu A, I_C=0$
C_{ob}	Output Capacitance		1.3	1.7	pF	$V_{CB}=10V, I_E=0, f=1MHz$
f_T	Current Gain-Bandwidth Product	700			MHz	$V_{CE}=5V, I_C=5mA$

h_{FE} Classification

F	G	H	I
54—80	72—108	97—146	132—198





Typical Characteristics

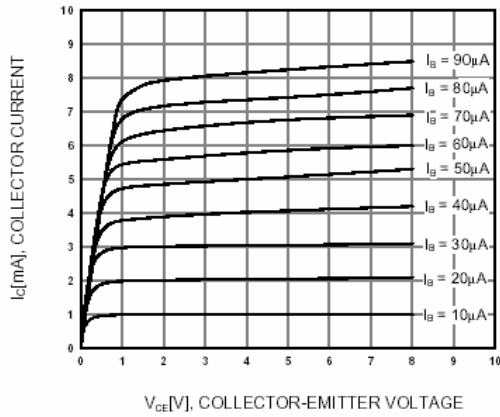


Figure 1. Static Characteristic

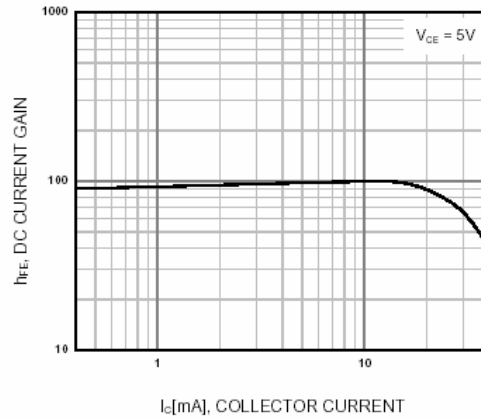


Figure 2. DC current Gain

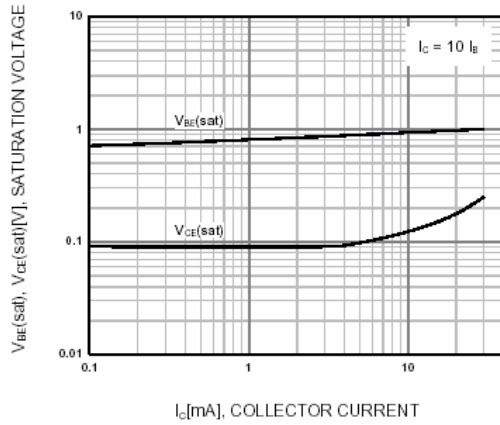


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

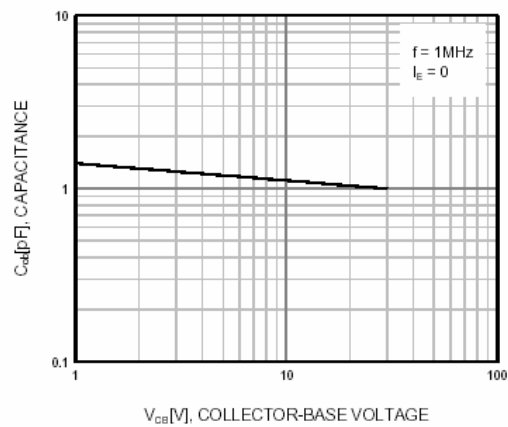


Figure 4. Output Capacitance

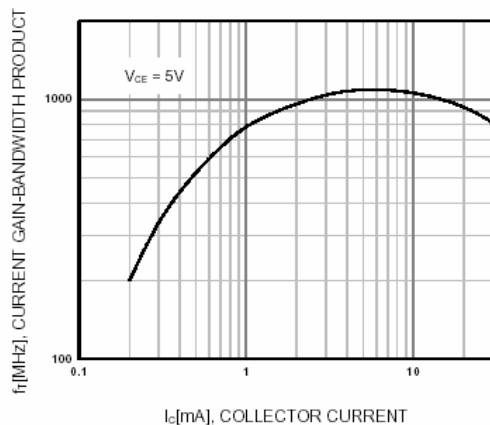


Figure 5. Current Gain Bandwidth Product

