

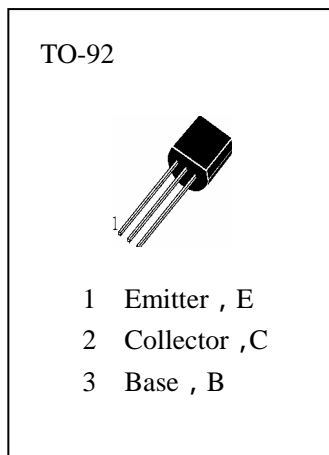


**APPLICATIONS**

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



**ELECTRICAL CHARACTERISTICS (  $T_a=25$  )**

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
$BV_{CBO}$	Collector-Base Breakdown Voltage	60			V	$I_C=100 \mu A, I_E=0$
$BV_{CEO}$	Collector-Emitter Breakdown Voltage	50			V	$I_C=100 \mu A, I_B=0$
$BV_{EBO}$	Emitter-Base Breakdown Voltage	5			V	$I_E=100 \mu A, I_C=0$
$h_{FE}$	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	$V_{CE}=6V, I_C=10mA$
$C_{ob}$	Output Capacitance		3.0		pF	$V_{CB}=6V, I_E=0, f=1MHZ$
NF	Noise Figure		4.0		dB	$V_{CE}=6V, I_C=0.5mA, f=1KHZ, R_S=500$

**$h_{FE}$  Classification**

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

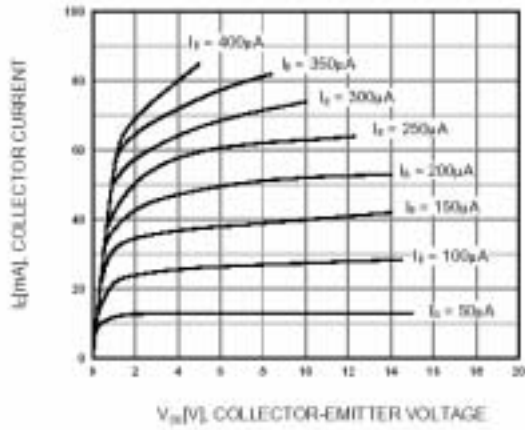


Figure 1. Static Characteristic

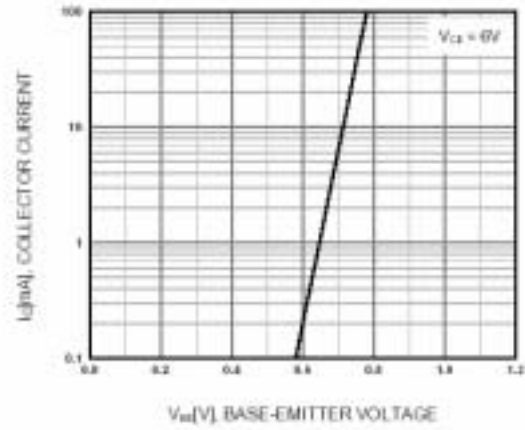


Figure 2. Transfer Characteristic

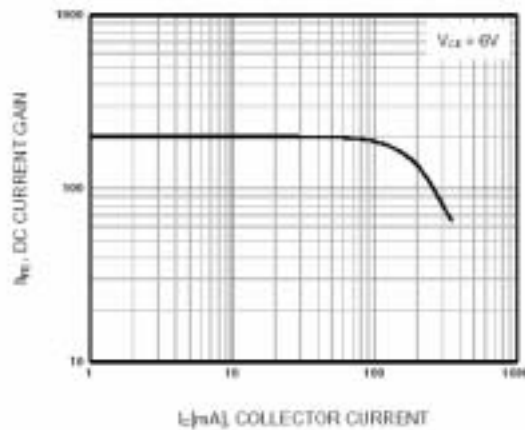


Figure 3. DC current Gain

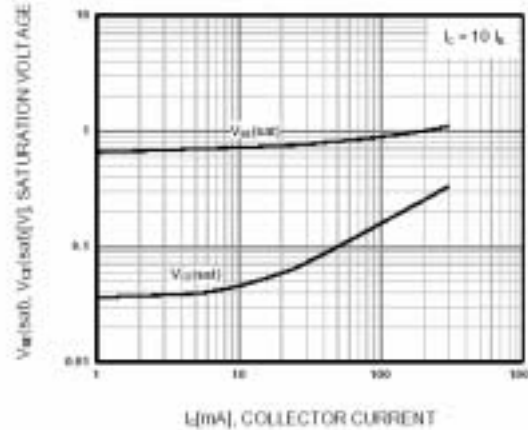


Figure 4. Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage

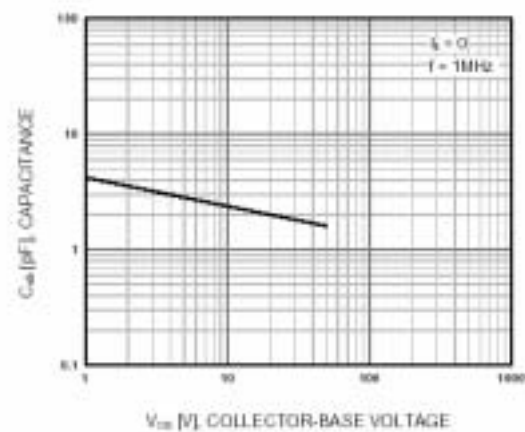


Figure 5. Output Capacitance

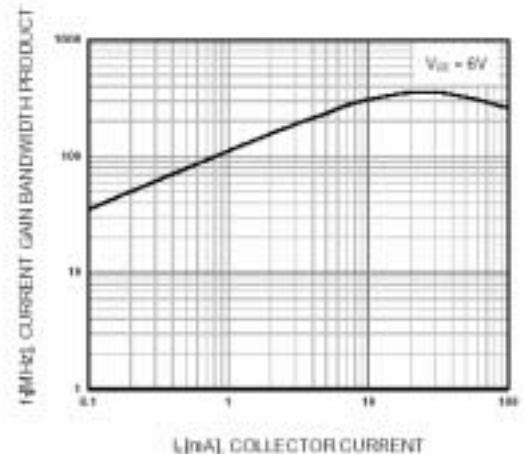


Figure 6. Current Gain Bandwidth Product