



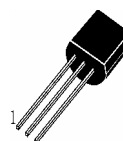
APPLICATIONS

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

ABSOLUTE MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$)

T_{stg}	— Storage Temperature	$-55\sim 150^{\circ}\text{C}$
T_j	— Junction Temperature	150°C
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 ($T_a=25^{\circ}\text{C}$)

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

h_{FE} Classification

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

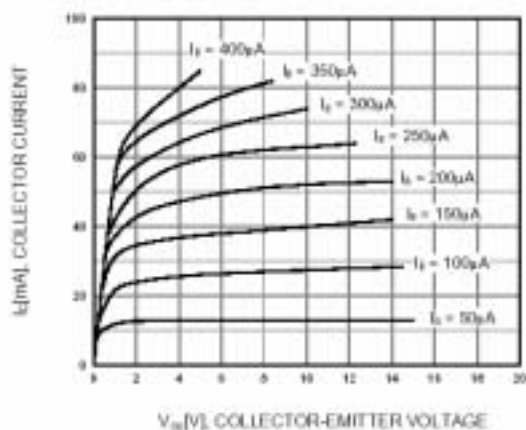


Figure 1. Static Characteristic

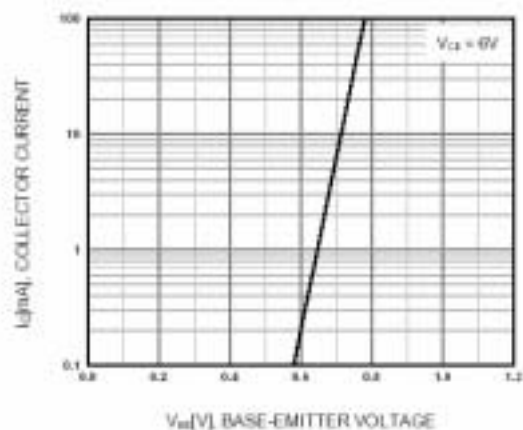


Figure 2. Transfer Characteristic

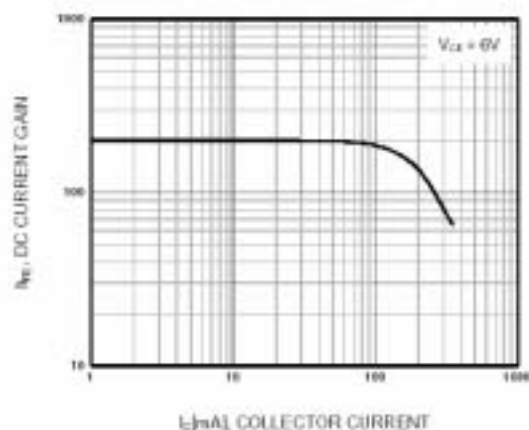


Figure 3. DC current Gain

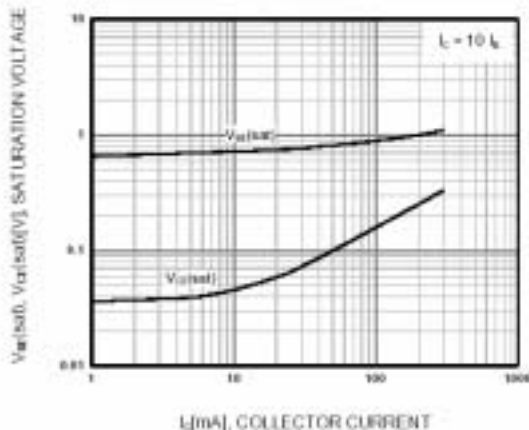


Figure 4. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

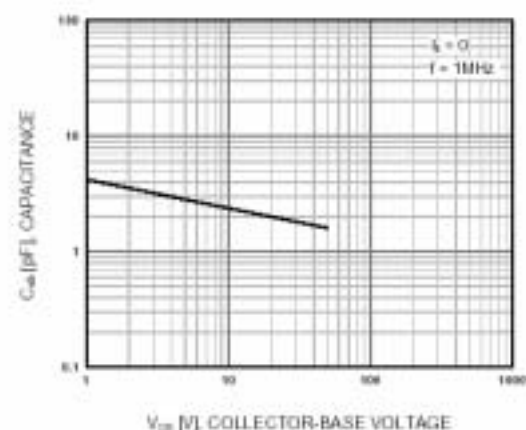


Figure 5. Output Capacitance

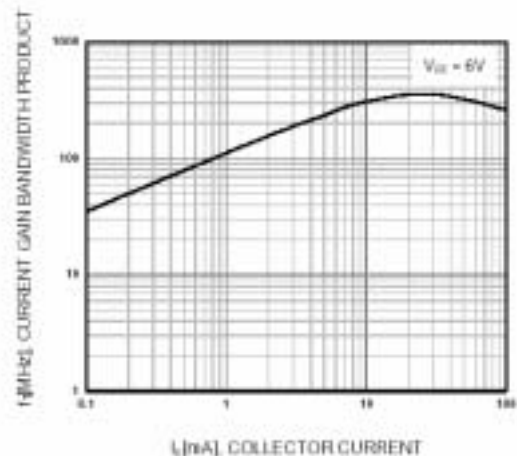


Figure 6. Current Gain Bandwidth Product