

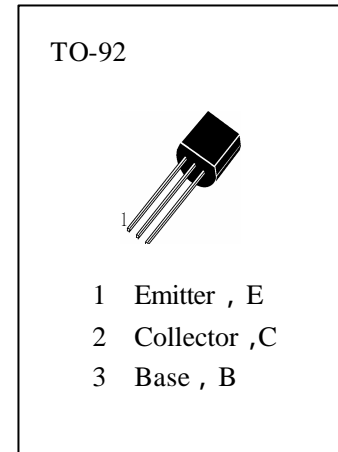


**APPLICATIONS**

Audio frequency power Aamplifier& Medium  
Speed switching Low frequency power amplifier.

**ABSOLUTE MAXIMUM RATINGS (  $T_a=25$  )**

- $T_{stg}$ —Storage Temperature..... -55~150
- $T_j$ —Junction Temperature.....150
- $P_C$ —Collector Dissipation.....750mW
- $V_{CBO}$ —Collector-Base Voltage.....-60V
- $V_{CEO}$ —Collector-Emitter Voltage.....-50V
- $V_{EBO}$ —Emitter-Base Voltage.....-6V
- $I_C$ —Collector Current.....-1A
- $I_{CP}$ —Collector Current ( Pulse ) .....-2A



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

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BVCBO	Collector-Base Breakdown Voltage	-60			V	$I_C=-10\mu A, I_E=0$
BVCEO	Collector-Emitter Breakdown Voltage	-50			V	$I_C=-1mA, I_B=0$
BVEBO	Emitter-Base Breakdown Voltage	-6			V	$I_E=-10\mu A, I_C=0$
ICBO	Collector Cut-off Current			-100	nA	$V_{CB}=-60V, I_E=0$
IEBO	Emitter Cut-off Current			-100	nA	$V_{EB}=-5V, I_C=0$
HFE ( 1 )	DC Current Gain	135		600		$V_{CE}=-2V, I_C=-100mA$
HFE ( 2 )	DC Current Gain	81				$V_{CE}=-2V, I_C=-1A$
$V_{CE(sat)}$	Collector- Emitter Saturation Voltage		-0.2	-0.3	V	$I_C=-1A, I_B=-50mA$
$V_{BE(sat)}$	Base-Emitter Saturation Voltage		-0.9	-1.2	V	$I_C=-1A, I_B=-50mA$
$V_{BE(on)}$	Base-Emitter On Voltage	-600	-650	-700	mV	$V_{CE}=-2V, I_C=-50mA$
ft	Current Gain-Bandwidth Product	70	120		MHz	$V_{CE}=-2V, I_C=-100mA$
Cob	Output Capacitance		25		pF	$V_{CB}=-10V, I_E=0, f=1MHz$

**hFE Classification**

Y	G	L
135—270	200—400	300—600

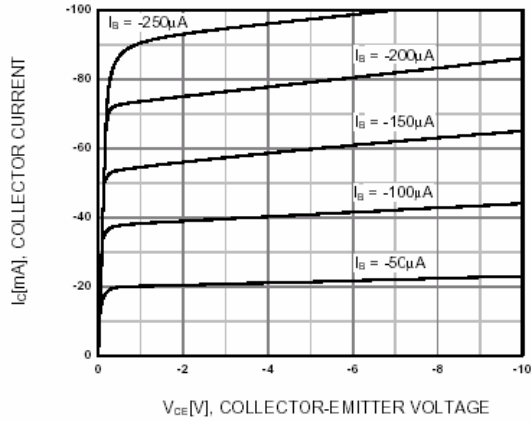


Figure 1. Static Characteristic

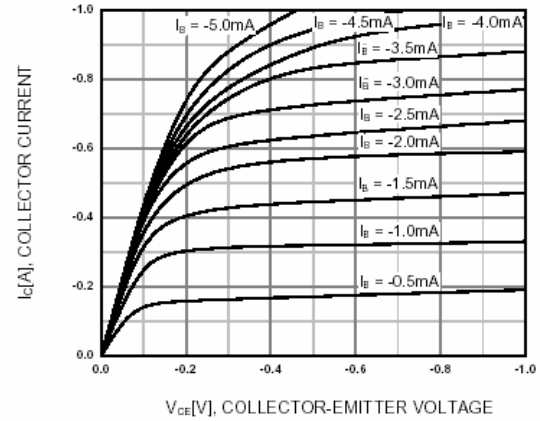


Figure 2. Static Characteristic

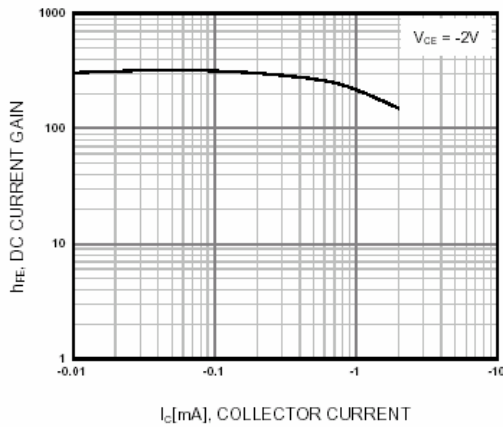


Figure 3. DC current Gain

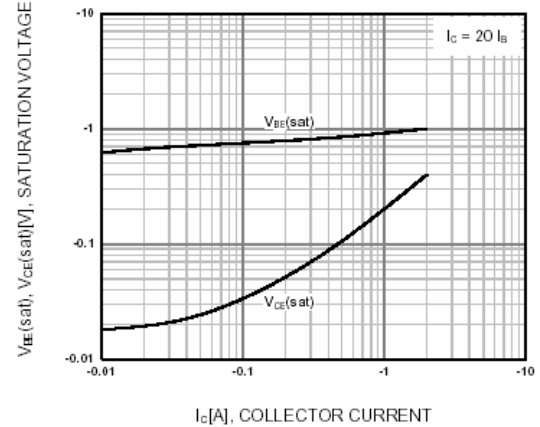


Figure 4. Base-Emitter Saturation Voltage  
Collector-Emmitter Saturation Voltage

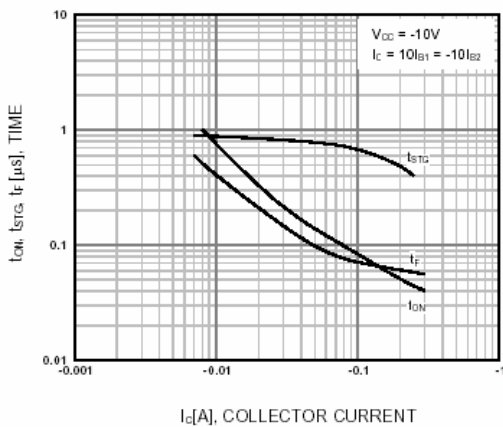


Figure 5. Switching Time

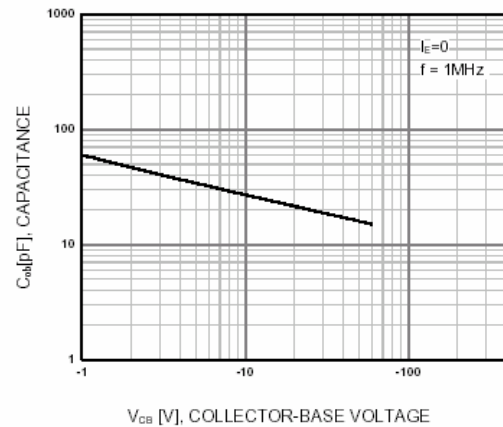


Figure 6. Collector Output Capacitance

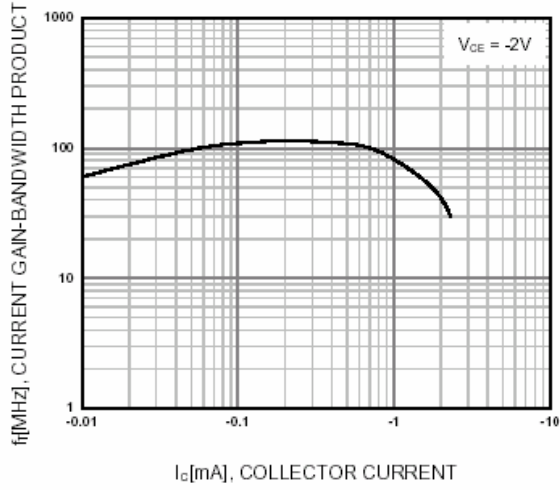


Figure 7. Current Gain Bandwidth Product

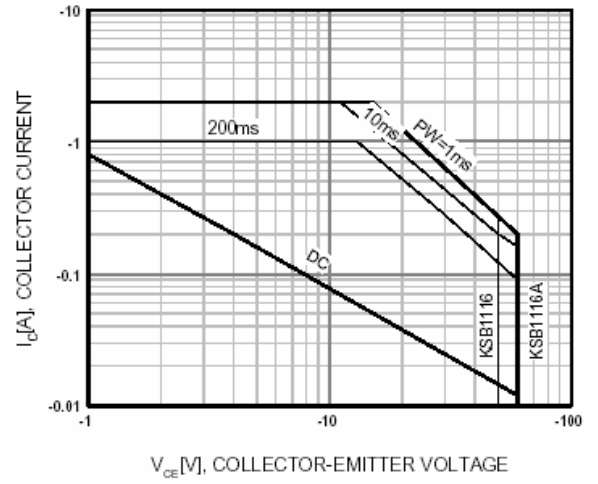


Figure 8. Safe Operating Area

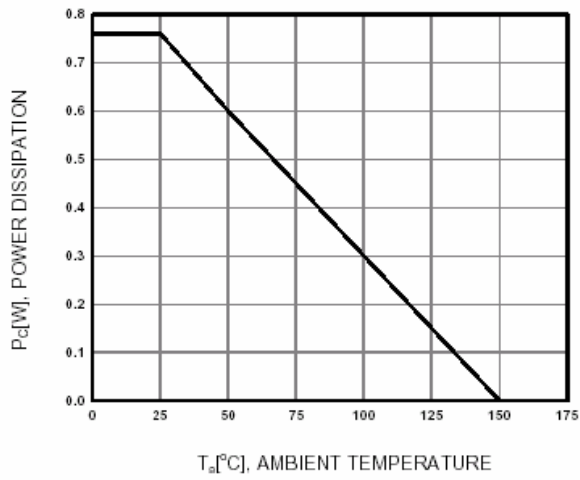


Figure 9. Power Derating