

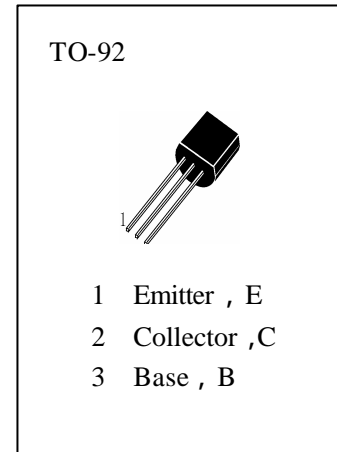


APPLICATIONS

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	$V_{EB}=-5V, I_C=0$
$H_{FE}(1)$	DC Current Gain	135		600		$V_{CE}=-2V, I_C=-100mA$
$H_{FE}(2)$	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	$V_{CE}=-2V, I_C=-50mA$
f_t	Current Gain-Bandwidth Product	70	120		MHz	$V_{CE}=-2V, I_C=-100mA$
C_{ob}	Output Capacitance		25		pF	$V_{CB}=-10V, I_E=0, f=1MHz$

h_{FE} Classification

Y	G	L
135—270	200—400	300—600

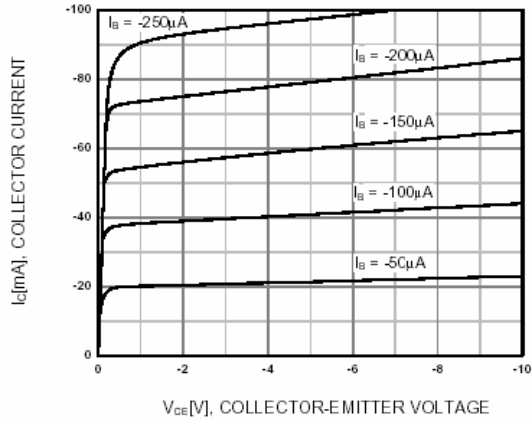


Figure 1. Static Characteristic

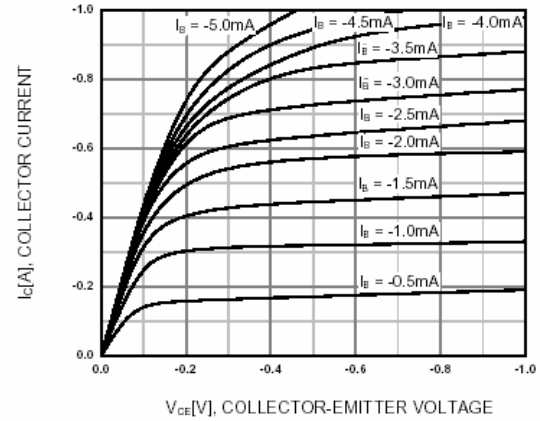


Figure 2. Static Characteristic

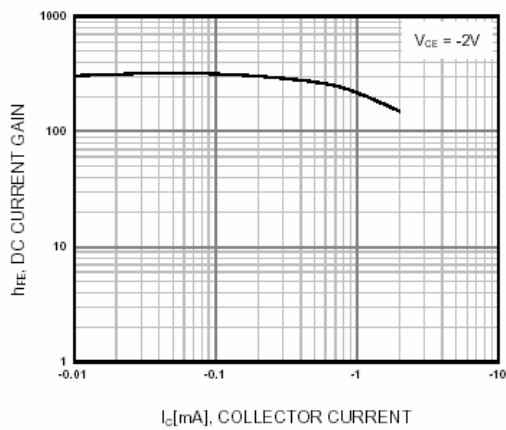


Figure 3. DC current Gain

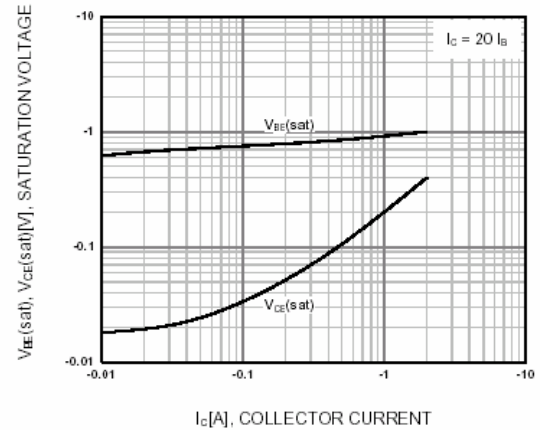


Figure 4. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

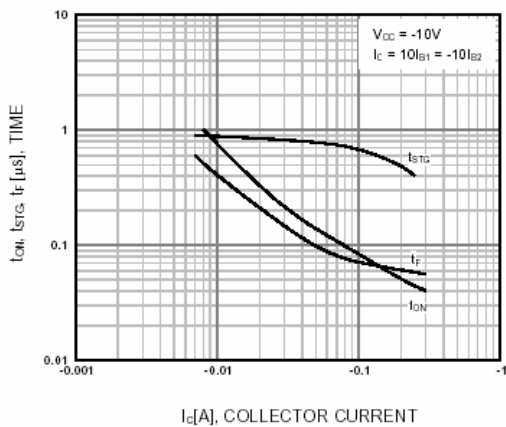


Figure 5. Switching Time

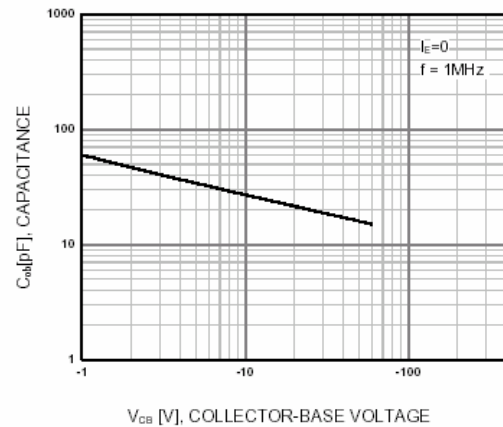


Figure 6. Collector Output Capacitance

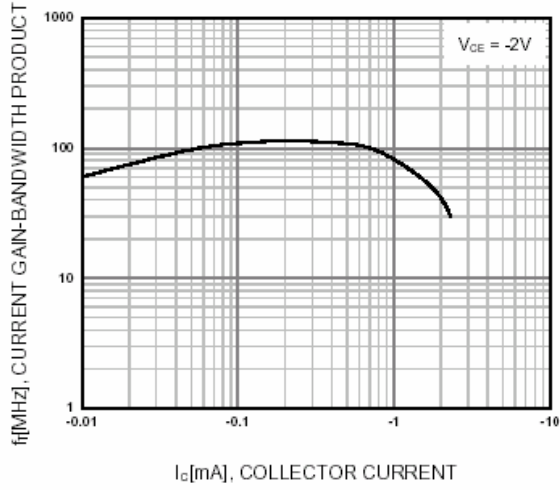


Figure 7. Current Gain Bandwidth Product

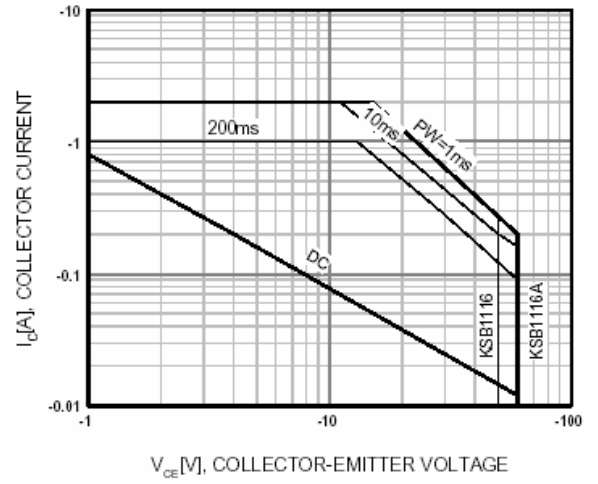


Figure 8. Safe Operating Area

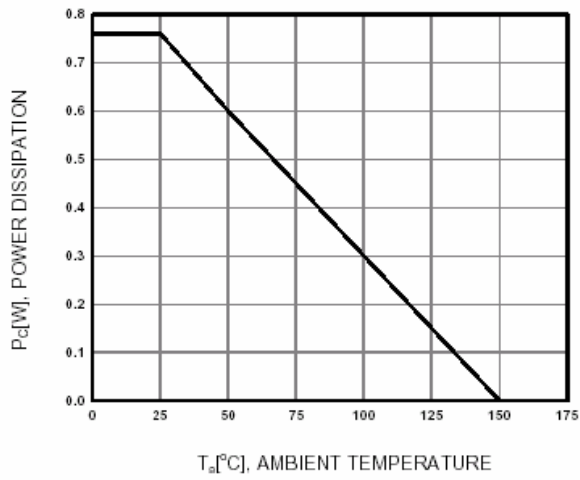


Figure 9. Power Derating