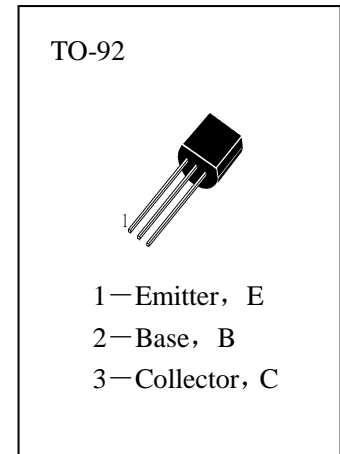


■ LOW FREQUENCY AMPLIFIER MEDIUM

SPEED SWITCHING

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

T_{stg}	Storage Temperature	-55~150°C
T_j	Junction Temperature	150°C
P_C	Collector Dissipation	800mW
V_{CBO}	Collector-Base Voltage	80V
V_{CEO}	Collector-Emitter Voltage	60V
V_{EBO}	Emitter-Base Voltage	8V
I_C	Collector Current	700mA



■ ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
I_{CBO}	Collector Cut-off Current			100	nA	$V_{CB}=60V, I_E=0$
I_{EBO}	Emitter Cut-off Current			100	nA	$V_{EB}=5V, I_C=0$
$h_{FE(1)}$	DC Current Gain	40		400		$V_{CE}=2V, I_C=50mA$
$V_{CE(sat)}$	Collector- Emitter Saturation Voltage		0.2	0.4	V	$I_C=500mA, I_B=50mA$
$V_{BE(sat)}$	Base-Emitter Saturation Voltage		0.86	1.1	V	$I_C=500mA, I_B=50mA$
BV_{CBO}	Collector-Base Breakdown Voltage	80			V	$I_C=100\ \mu A, I_E=0$
BV_{CEO}	Collector-Emitter Breakdown Voltage	60			V	$I_C=10mA, I_B=0$
BV_{EBO}	Emitter-Base Breakdown Voltage	8			V	$I_E=10\ \mu A, I_C=0$
f_T	Current Gain-Bandwidth Product	30	50		MHz	$V_{CE}=10V, I_C=50mA$
C_{ob}	Output Capacitance		8		pF	$V_{CB}=10V, I_E=0, f=1MHz$

■ h_{FE} Classification

R	O	Y	GR
40—80	70—140	120—240	240—400

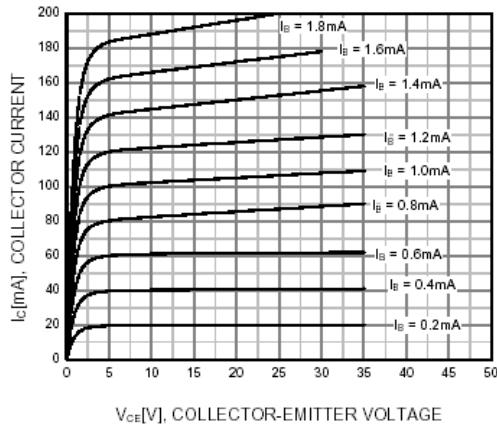


Figure 1. Static Characteristic

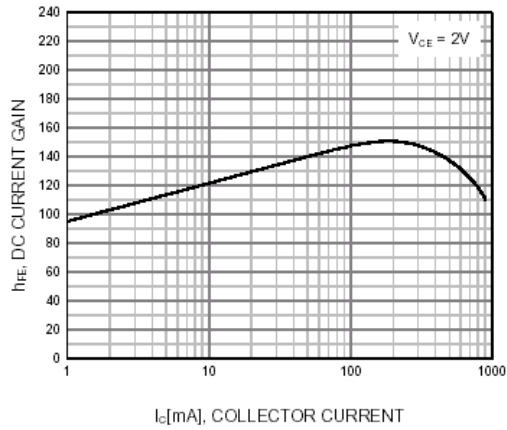


Figure 2. DC current Gain

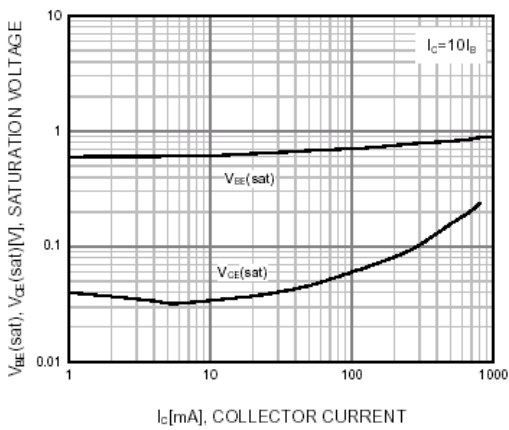


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

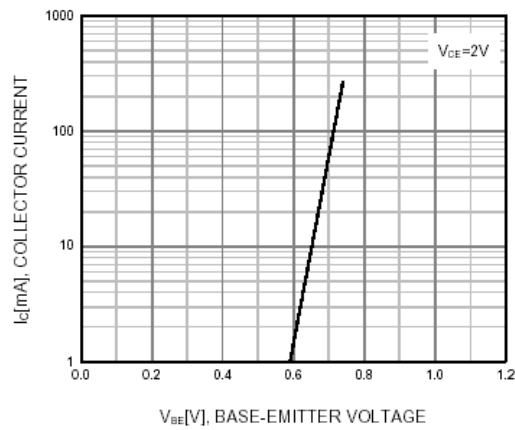


Figure 4. Base-Emitter On Voltage

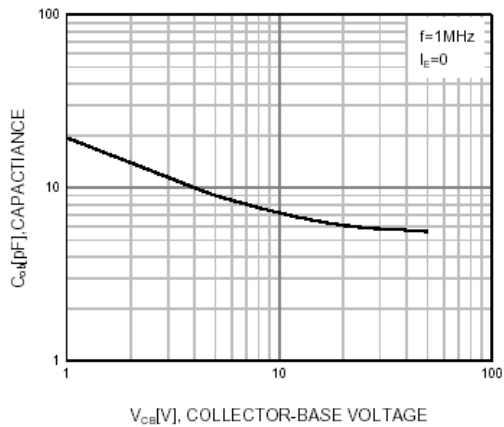


Figure 5. Collector Output Capacitance