

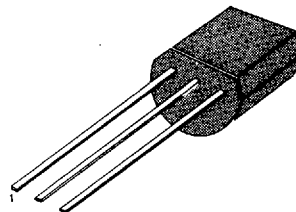
AM/FM IF AMPLIFIER, LOCAL OSCILLATOR OF FM/VHF TUNER

- High Current Gain Bandwidth Product $f_T=1,100$ MHz (Typ)

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

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	30	V
Collector-Emitter Voltage	V_{CEO}	15	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	50	mA
Collector Dissipation	P_C	400	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	$-55\sim 150$	$^\circ\text{C}$

TO-92



1. Emitter 2. Base 3. Collector

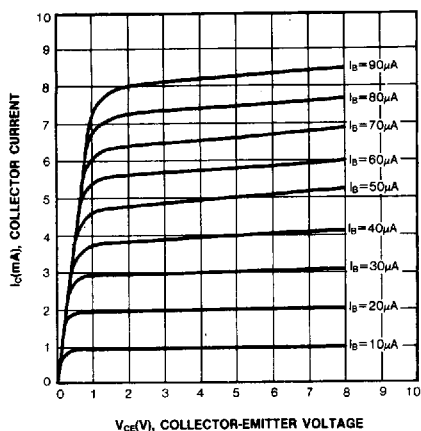
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C=100\mu\text{A}$, $I_E=0$	30			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=1.0\text{mA}$, $I_B=0$	15			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E=100\mu\text{A}$, $I_C=0$	5			V
Collector Cutoff Current	I_{CBO}	$V_{CB}=12\text{V}$, $I_E=0$			50	nA
DC Current Gain	h_{FE}	$V_{CE}=5\text{V}$, $I_C=1.0\text{mA}$	28	100	198	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=10\text{mA}$, $I_B=1\text{mA}$			0.5	V
Output Capacitance	C_{ob}	$V_{CB}=10\text{V}$, $I_E=0$ $f=1\text{MHz}$		1.3	1.7	pF
Current Gain-Bandwidth Product	f_T	$V_{CE}=5\text{V}$, $I_C=5\text{mA}$	700	1100		MHz

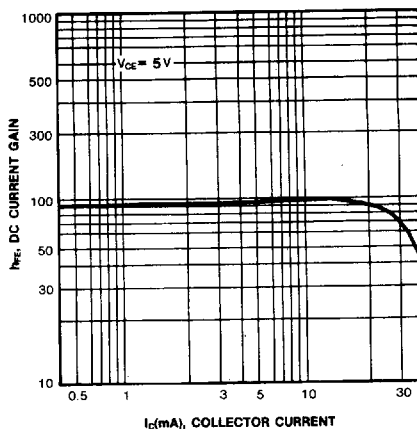
h_{FE} CLASSIFICATION

Classification	D	E	F	G	H	I
h_{FE}	28-45	39-60	54-80	72-108	97-146	132-198

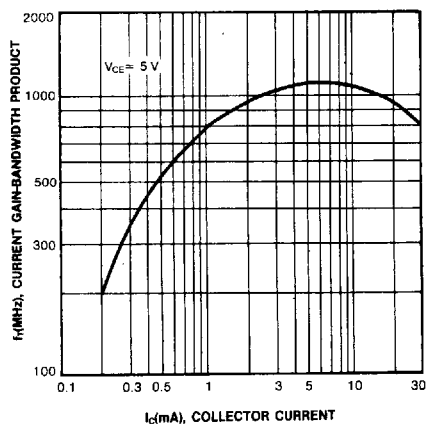
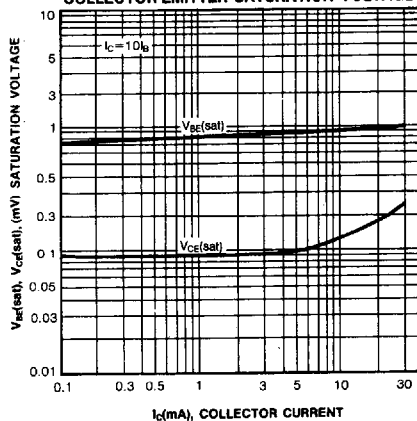
STATIC CHARACTERISTIC



DC CURRENT GAIN



CURRENT GAIN-BANDWIDTH PRODUCT

BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE

OUTPUT CAPACITANCE

