

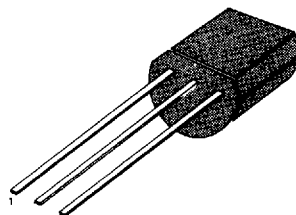
AM CONVERTER, FM/RF AMPLIFIER OF LOW NOISE.

- High total power dissipation. (PT=400mW)

ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	30	V
Collector-Emitter Voltage	V _{CE0}	20	V
Emitter-Base Voltage	V _{EB0}	4	V
Collector Current	I _C	25	mA
Collector Dissipation	P _C	400	mW
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55~150	°C

TO-92



1. Emitter 2. Base 3. Collector

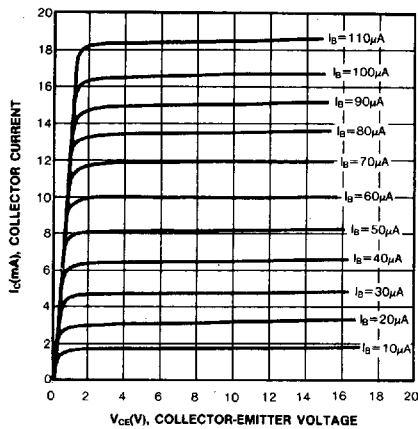
ELECTRICAL CHARACTERISTICS (T_a=25°C)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV _{CB0}	I _C =100μA, I _E =0	30			V
Collector-Emitter Breakdown Voltage	BV _{CE0}	I _C =1mA, I _B =0	20			V
Emitter-Base Breakdown Voltage	BV _{EB0}	I _E =100μA, I _C =0	4			V
Collector Cutoff Current	I _{CB0}	V _{CB} =30V, I _E =0			100	nA
Emitter Cutoff Current	I _{EB0}	V _{EB} =3V, I _C =0			100	nA
DC Current Gain	h _{FE}	V _{CE} =5V, I _C =1mA	28	90	198	
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C =10mA, I _B =1mA		0.1	0.3	V
Base-Emitter On Voltage	V _{BE (on)}	V _{CE} =5V, I _C =1mA		0.72		V
Output Capacitance	C _{ob}	V _{CB} =10V, I _E =0 f=1MHz		1.2	1.6	pF
Current Gain-Bandwidth Product	f _T	V _{CE} =5V, I _C =1mA	400	620		MHz
Noise Figure	NF	V _{CE} =5V, I _C =1.0mA f=100MHz, R _s =50Ω		3.0	5.0	dB

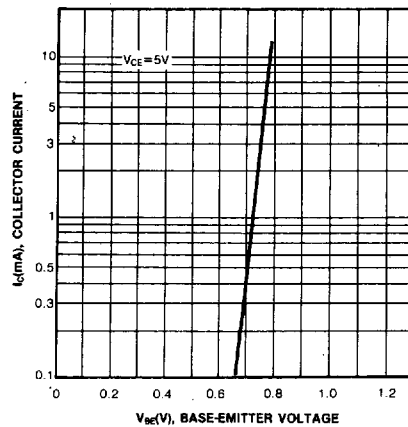
h_{FE} CLASSIFICATION

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

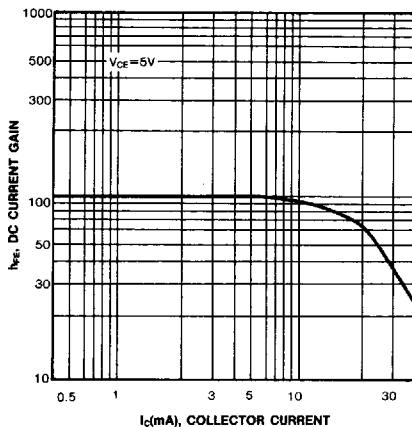
STATIC CHARACTERISTIC



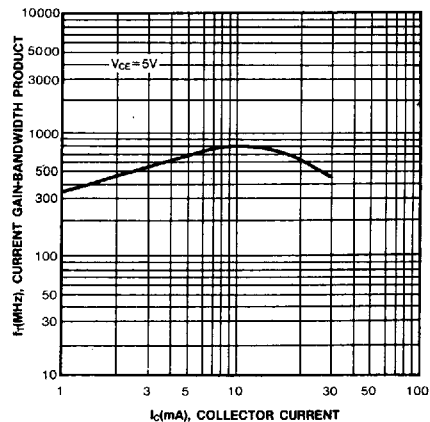
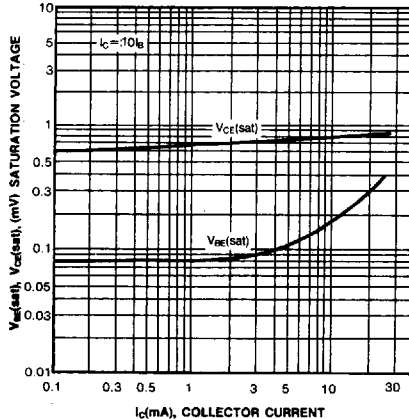
BASE-EMITTER ON VOLTAGE



DC CURRENT GAIN



CURRENT GAIN-BANDWIDTH PRODUCT

BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE

COLLECTOR OUTPUT CAPACITANCE

