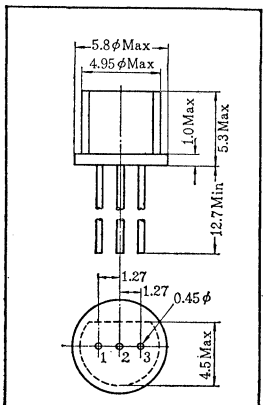
2SC382

○テレビ PIF 1, 2 段増幅用

○TV 1st, 2nd Picture IF Amplifire Applications

- 高利得です：G_{pe}=33dB (Typ.) (f=45MHz)
- 順方向 AGC 特性が良い．／Excellent forward AGC characteristic.

Unit in mm



1. Emitter
2. Collector
3. Base

JEDEC	—
EIAJ	—
TOSHIBA	2-5B

最大定格 Maximum Ratings (Ta=25°C)

Characteristic	Symbol	Rating	Unit
コレクタ・ベース間電圧	V_{CBO}	40	V
エミッタ・ベース間電圧	V_{EBO}	2	V
コレクタ電流	I_C	50	mA
エミッタ電流	I_E	−50	mA
コレクタ損失	P_C	200	mW
接合部温度	T_J	125	°C
保存温度	T_{stg}	−55～125	°C

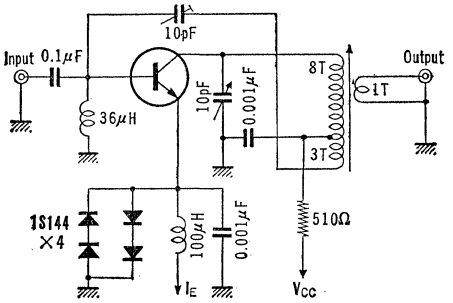
電気的特性 Electrical Characteristics (Ta=25°C)

Characteristic	Symbol	Test condition	Min.	Typ.	Max.	Unit
コレクタしゃ断電流	I_{CBO}	V_{CB}=18V, I_E=0	—	—	0.5	μA
エミッタしゃ断電流	I_{EBO}	V_{EB}=2V, I_C=0	—	—	10	μA
直流電流増幅率	h_{FE}	V_{CE}=10V, I_C=4mA	30	—	—	
トランジション周波数	f_T	V_{CE}=10V, I_C=4mA	400	600	—	MHz
ベース拡がり抵抗	$r_{bb'}$	V_{CE}=6V, I_E=−2mA, f=30MHz	—	18	30	Ω
帰還容量	C_{re}	V_{CE}=10V, I_E=0, f=1MHz	—	1.0	1.2	pF
電力利得 Fig. 1	G_{pe}	V_{CE}=10V, I_C=4mA, f=45MHz	32	—	40	dB
AGC 電流＊	I_{AGC}	V_{CC}=12V, f=45MHz	8.2	—	10.8	mA

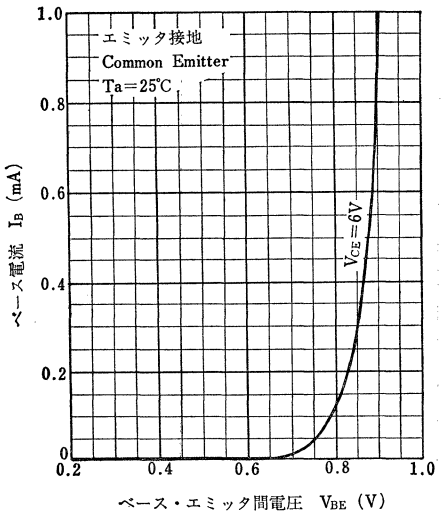
＊ 電力利得が I_C=4mA の時の値から 30dB 下がる点における I_C の値

I_C measured by circuit shown in Fig. 1, when power gain, reduced 30dB compared with that of I_C at 4mA.

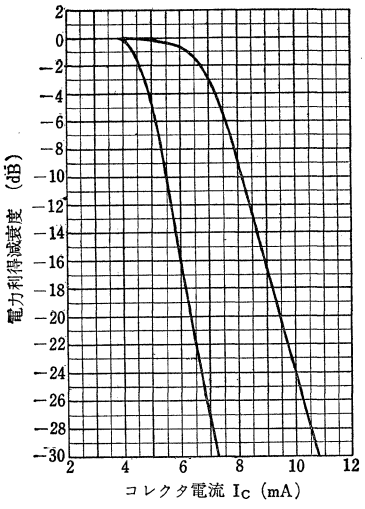
Fig. 1 電力利得および AGC 特性測定回路 (f=45MHz).
Power Gain and AGC Characteristics Test Circuits (f=45MHz)



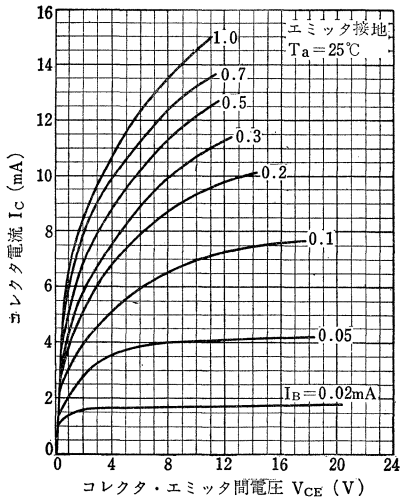
I_B–V_{BE}



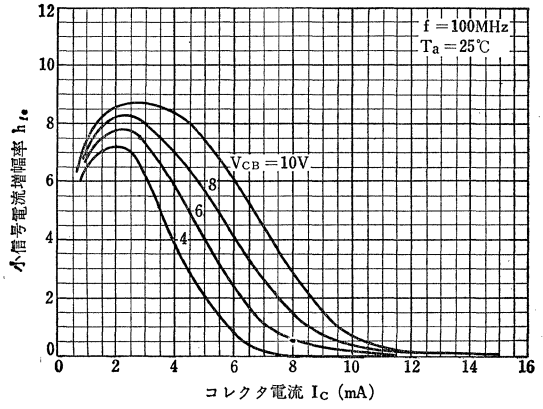
AGC Characteristics (see Fig. 1)



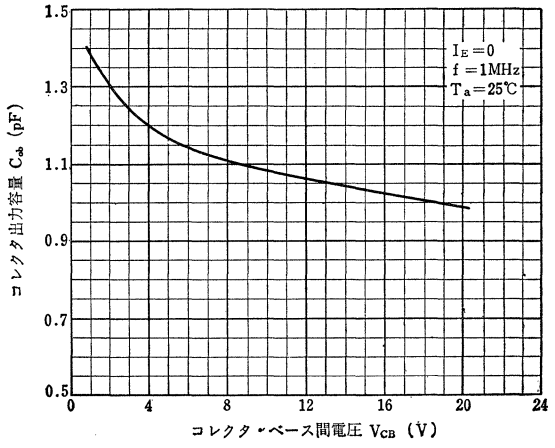
I_C–V_{CE}



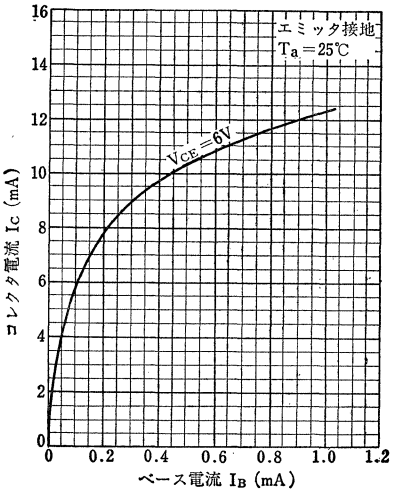
h_{fe}–I_C



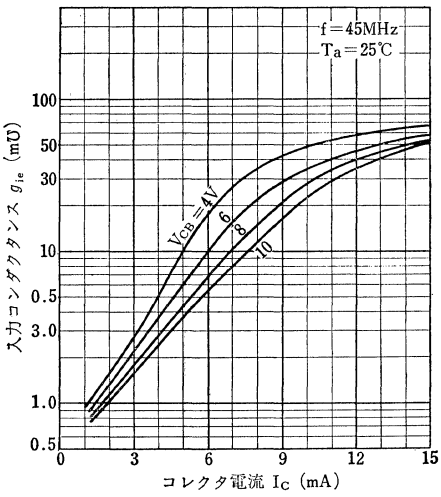
C_{ob}–V_{CB}



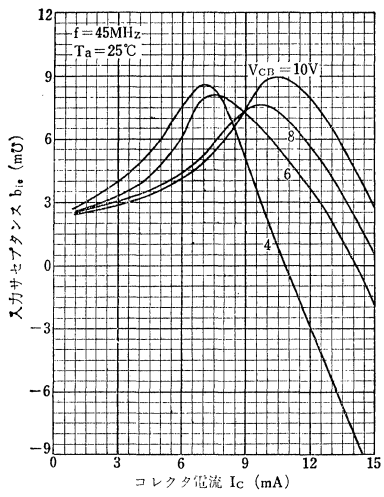
I_C–I_B



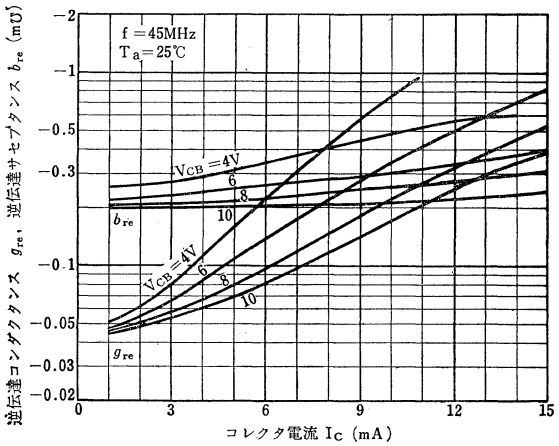
g_{ie}–I_C



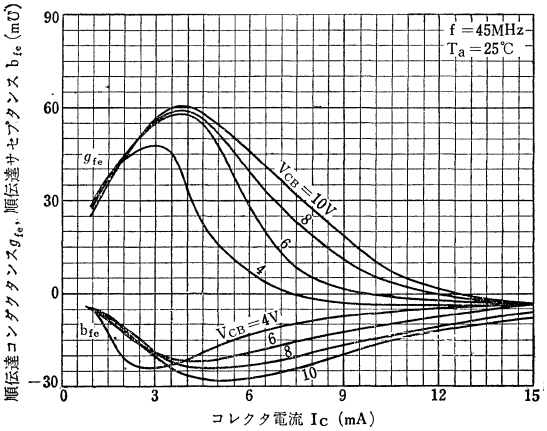
b_{ie}–I_C



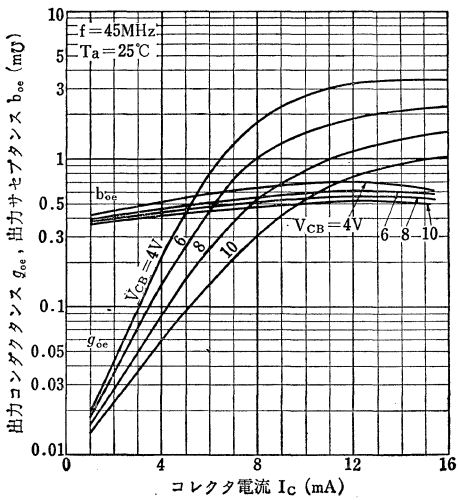
g_{re}, b_{re}–I_C



g_{fe}, b_{fe}–I_C



g_{oe}, b_{oe}–I_C



P_C–T_a