Shantou Huashan Electronic Devices Co.,Ltd.

NPN SILICON TRANSISTOR

H2216

APPLICATIONS

TV FINAL PICTURE IF AMPLIFIER APPLICATIONS.

ABSOLUTE MAXIMUM RATINGS（T_a=25℃）

T_{stg}——Storage Temperature…… -55~150℃

T_j——Juncttion Temperature……150℃

P_C——Collector Dissipation……300mW

V_{CBO}——Collector-Base Voltage……50V

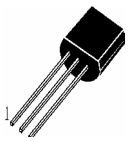
V_{CEO}——Collector-Emitter Voltage……45V

V_{EBO}——Emitter-Base Voltage……4V

I_C——Collector Current……50mA

Ie——Emitter Current……-50mA

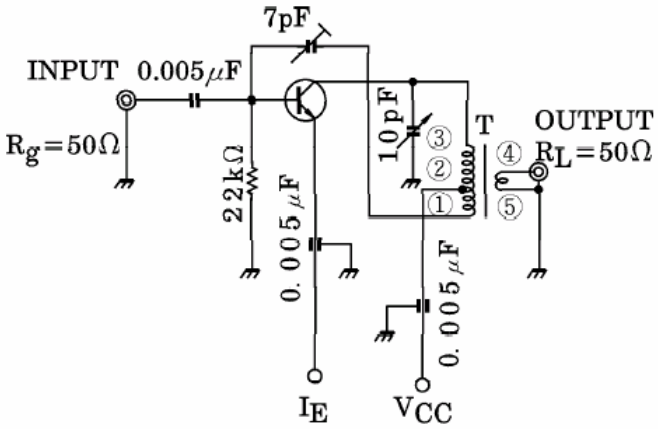
TO-92



1－Base，B
2－Emitter，E
3－Collector，C

ELECTRICAL CHARACTERISTICS（T_a=25℃）

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV_{CBO}	Collector-Base Breakdown Voltage	50			V	I_C=100μA，I_E=0
BV_{CEO}	Collector-Emitter Breakdown Voltage	45			V	I_C=10mA，I_B=0
BV_{EBO}	Emitter- Base Breakdown Voltage	4			V	I_E=100μA，I_C=0
I_{CBO}	Collector Cut-off Current			0.1	μA	V_{CB}=30V, I_E=0
I_{EBO}	Emitter Cut-off Current			0.1	μA	V_{EB}=3V, I_C=0
H_{FE}	DC Current Gain	40		140		V_{CE}=12.5V, I_C=12.5mA
$V_{CE(sat)}$	Collector- Emitter Saturation Voltage			0.2	V	I_C=15mA, I_B=1.5mA
$V_{BE(sat)}$	Base- Emitter Saturation Voltage			1.5	V	I_C=15mA,I_B=1.5mA
Cob	Output Capacacitance	0.8		2.0	pF	V_{CB}=10V,I_E=0，f=30MHz
f_T	Current Gain-Bandwidth Product	300			MHz	V_{CE}=12.5V, I_C=12.5mA
Gpe	Power Gain（Fig）	29		36	dB	Vcc=12.5V, I_E=-12.5mA, f=45MHz



COIL DATA

0.20mmϕ Cu WIRE

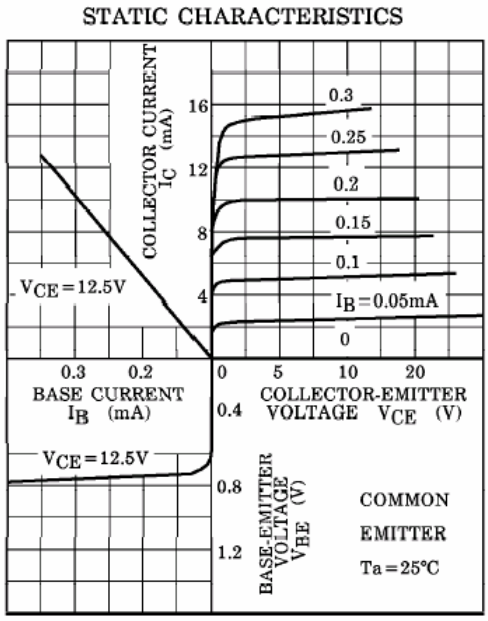
L=1.2μH WITH M-5 CORE

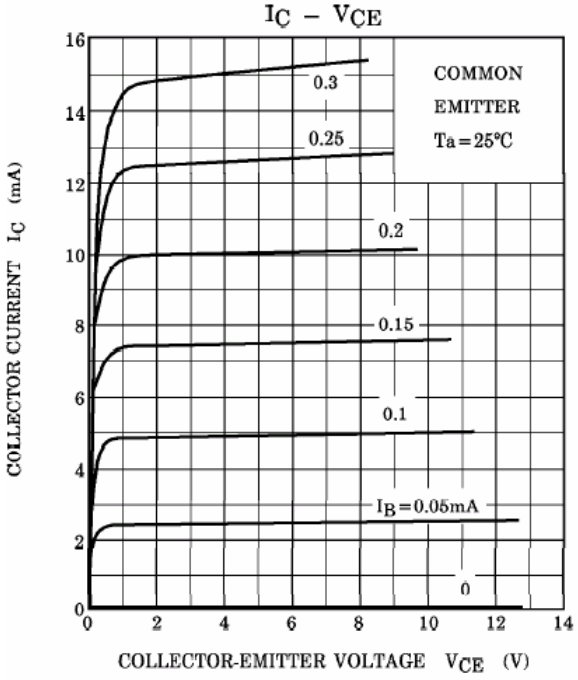
T : ①-② 3.0T

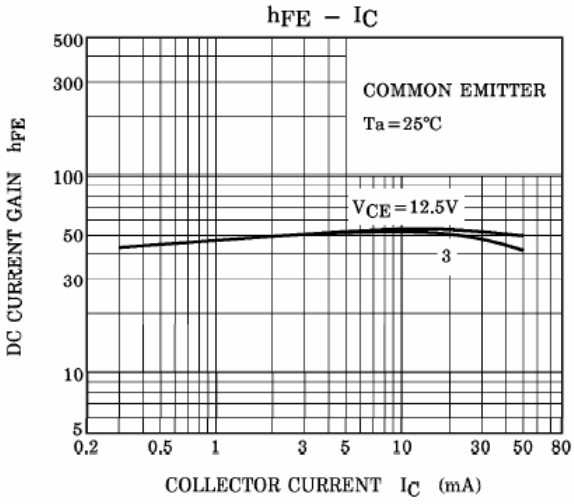
②-③ 8.0T

④-⑤ 1.0T

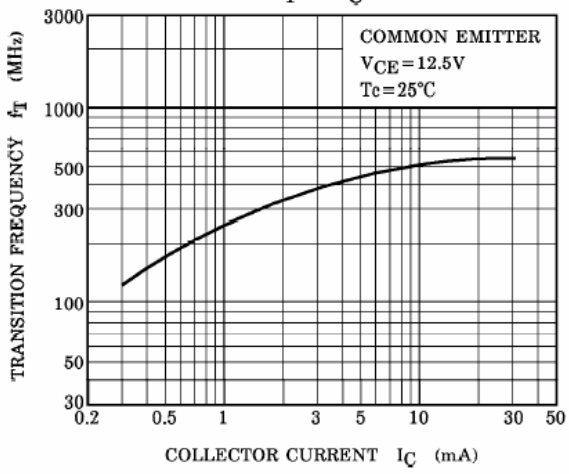
Fig. 45MHz G_{pe} TEST CIRCUIT



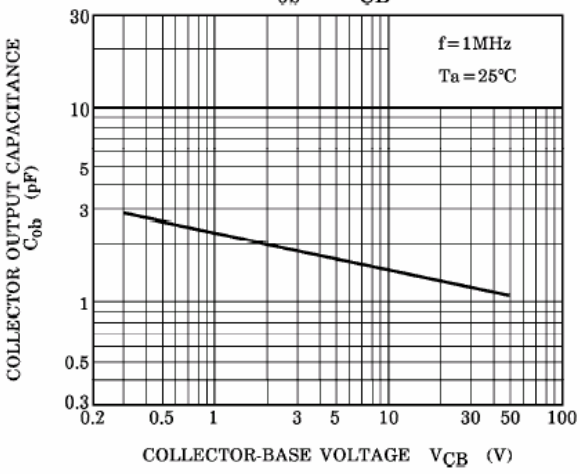




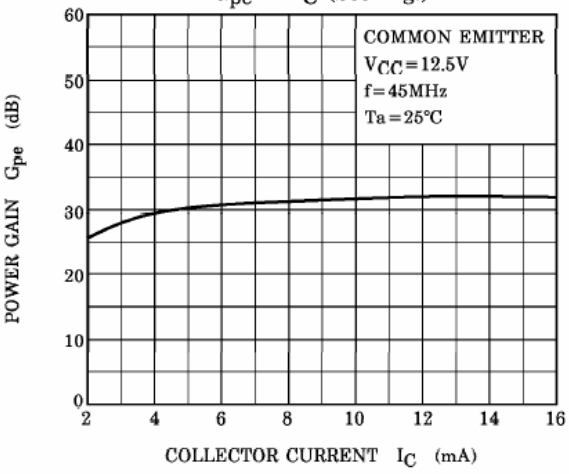
f_T – I_C



C_{ob} – V_{CB}



G_{pe} – I_C (See Fig.)



P_C – Ta

