



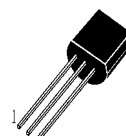
APPLICATIONS

TV FINAL PICTURE IF AMPLIFIER APPLICATIONS.

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

T_{stg}	Storage Temperature	-55~150 $^{\circ}\text{C}$
T_j	Junction Temperature	150 $^{\circ}\text{C}$
P_C	Collector Dissipation	300mW
V_{CBO}	Collector-Base Voltage	30V
V_{CEO}	Collector-Emitter Voltage	25V
V_{EBO}	Emitter-Base Voltage	4V
I_C	Collector Current	50mA
I_e	Emitter Current	50mA

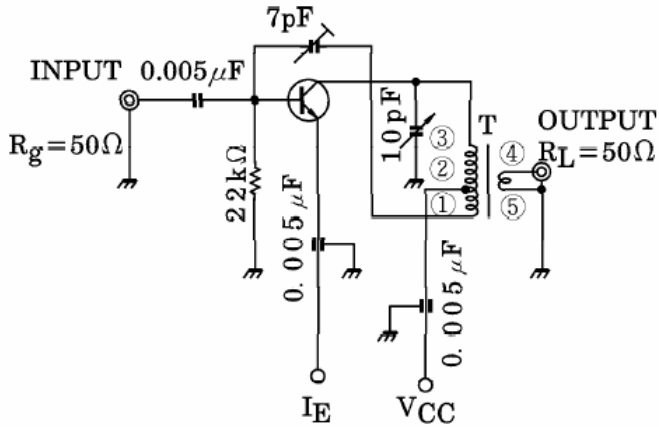
TO-92



- 1—Base, B
- 2—Emitter, E
- 3—Collector, C

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

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV_{CBO}	Collector-Base Breakdown Voltage	30			V	$I_C=100\mu\text{A}$, $I_E=0$
BV_{CEO}	Collector-Emitter Breakdown Voltage	25			V	$I_C=10\text{mA}$, $I_B=0$
BV_{EBO}	Emitter- Base Breakdown Voltage	4			V	$I_E=100\mu\text{A}$, $I_C=0$
I_{CBO}	Collector Cut-off Current			0.1	μA	$V_{\text{CB}}=30\text{V}$, $I_E=0$
I_{EBO}	Emitter Cut-off Current			0.1	μA	$V_{\text{EB}}=3\text{V}$, $I_C=0$
H_{FE}	DC Current Gain	40		240		$V_{\text{CE}}=12.5\text{V}$, $I_C=12.5\text{mA}$
$V_{\text{CE(sat)}}$	Collector- Emitter Saturation Voltage			0.2	V	$I_C=15\text{mA}$, $I_B=1.5\text{mA}$
$V_{\text{BE(sat)}}$	Base- Emitter Saturation Voltage			1.5	V	$I_C=15\text{mA}$, $I_B=1.5\text{mA}$
C_{ob}	Output Capacacitance	0.8		2.0	pF	$V_{\text{CB}}=10\text{V}$, $I_E=0$, $f=30\text{MHz}$
f_{T}	Current Gain-Bandwidth Product	300			MHz	$V_{\text{CE}}=12.5\text{V}$, $I_C=12.5\text{mA}$
G_{pe}	Power Gain (Fig)	28		36	dB	$V_{\text{CC}}=12.5\text{V}$, $I_E=-12.5\text{mA}$, $f=45\text{MHz}$



COIL DATA

0.20mm ϕ Cu WIRE
 $L = 1.2\mu\text{H}$ WITH M-5 CORE
 T : ①-② 3.0T
 ②-③ 8.0T
 ④-⑤ 1.0T

Fig. 45MHz G_{pe} TEST CIRCUIT

STATIC CHARACTERISTICS

