

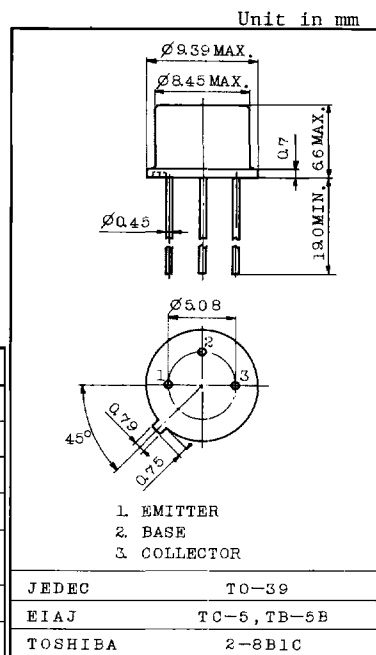
VHF BAND POWER AMPLIFIER APPLICATIONS.

FEATURES :

- Output Power : $P_o=1\text{W}$ (Min.)
($f=175\text{MHz}$, $V_{CC}=12.6\text{V}$, $P_i=0.1\text{W}$)

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

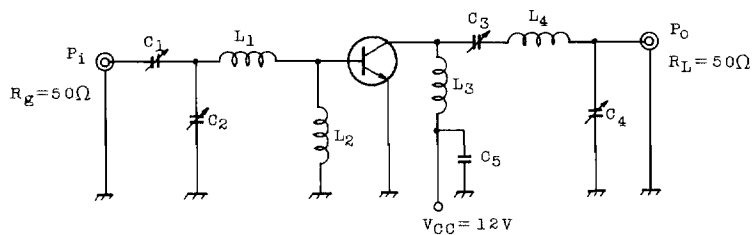
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	40	V
Collector-Emitter Voltage	V_{CEO}	20	V
Emitter-Base Voltage	V_{EBO}	4	V
Collector Current	I_C	0.4	A
Collector Power Dissipation ($T_c=25^\circ\text{C}$)	P_C	5	W
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	$-65 \sim 175$	$^\circ\text{C}$



Weight : 1.2g

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=15\text{V}$, $I_E=0$	-	-	1.0	μA
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=1\text{mA}$, $I_E=0$	40	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=5\text{mA}$, $I_B=0$	20	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=1\text{mA}$, $I_C=0$	4	-	-	V
DC Current Gain	h_{FE}	$V_{CE}=5\text{V}$, $I_C=50\text{mA}$	20	-	-	-
Collector Output Capacitance	C_{ob}	$V_{CB}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$	-	6.5	10	pF
Output Power	P_o	(Fig.)	1.0	1.3	-	W
Power Gain	G_{pe}	$V_{CC}=12.6\text{V}$, $f=175\text{MHz}$,	10	11.1	-	dB
Collector Efficiency	η_c	$P_i=0.1\text{W}$	60	64	-	%

Fig. P_O TEST CIRCUIT

 C_1, C_2, C_3, C_4 : 3.5 ~ 30pF

 C_5 : 0.001 μ F FEED THROUGH AND 0.05 μ F CERAMIC CONDENSER

 L_1, L_3 : ϕ 1.2 SILVER PLATED COPPER WIRE, 8ID, 1T

 L_2 : 1 μ H CHOLK COIL

 L_4 : ϕ 1.2 SILVER PLATED COPPER WIRE, 8ID, 7/4T
