

2SC2508

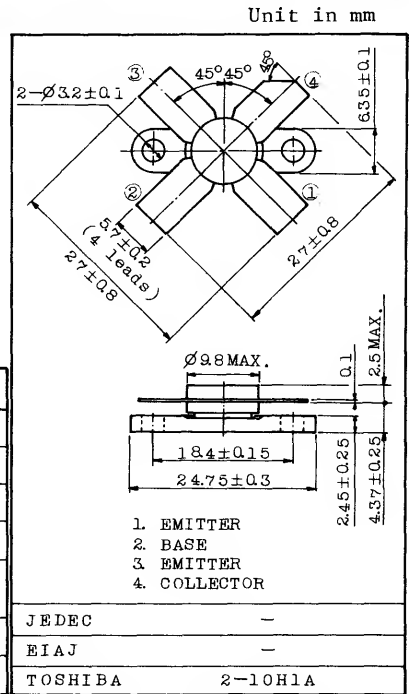
VHF BAND POWER AMPLIFIER APPLICATIONS.

FEATURES :

- Output Power : $P_o=27W$ (Min.)
($f=175MHz$, $V_{CC}=12.5V$, $P_i=4.2W$)

MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	40	V
Collector-Emitter Voltage	V_{CEO}	18	V
Emitter-Base Voltage	V_{EBO}	4	V
Collector Current	I_C	6	A
Collector Power Dissipation (Tc=25 °C)	P_C	50	W
Junction Temperature	T_j	175	°C
Storage Temperature Range	T_{stg}	-65 ~ 175	°C



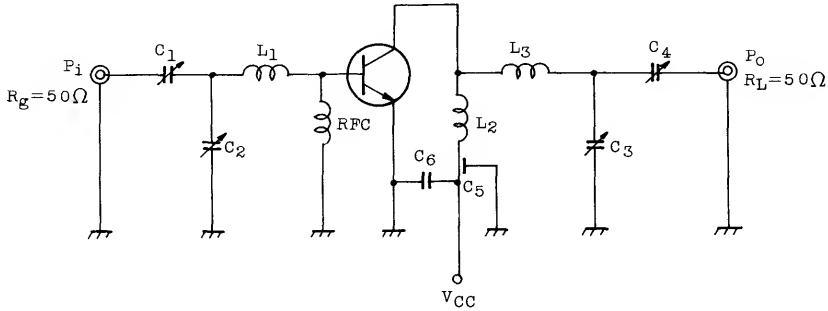
Weight : 4.0g

ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=15V$, $I_E=0$	-	-	1	mA
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10mA$, $I_E=0$	40	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=25mA$, $I_B=0$	18	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=1mA$, $I_C=0$	4	-	-	V
DC Current Gain	h_{FE}	$V_{CE}=5V$, $I_C=3A$	10	-	150	
Collector Output Capacitance	C_{ob}	$V_{CB}=10V$, $I_E=0$, $f=1MHz$	-	-	80	pF
Output Power	P_o	(Fig.) $V_{CC}=12.5V$, $f=175MHz$, $P_i=4.2W$	27	29	-	W
Power Gain	G_{pe}		8.0	8.4	-	dB
Collector Efficiency	η_c		60	70	-	%

2SC2508

Fig. P_O TEST CIRCUIT



- C_1 : ~20pF C_2, C_3, C_4 : ~30pF C_5 : 1000pF FEED THROUGH
 C_6 : 0.01 μ F
 L_1, L_3 : ϕ 1 SILVER PLATED COPPER WIRE, 6ID, 1T
 L_2 : ϕ 1 SILVER PLATED COPPER WIRE, 6ID, 2T
 RFC : ϕ 1 ENAMEL COATED COPPER WIRE, 6ID, 8T

