

RF Power Amplifier Module

VHF Power Amplifier Module (HAM 25W FM)

220 - 225MHz

Features

- Output Power : $P_o \geq 32W$
- Minimum Gain : $G_p = 22.0dB$
- Efficiency : $\eta_T \geq 45\%$

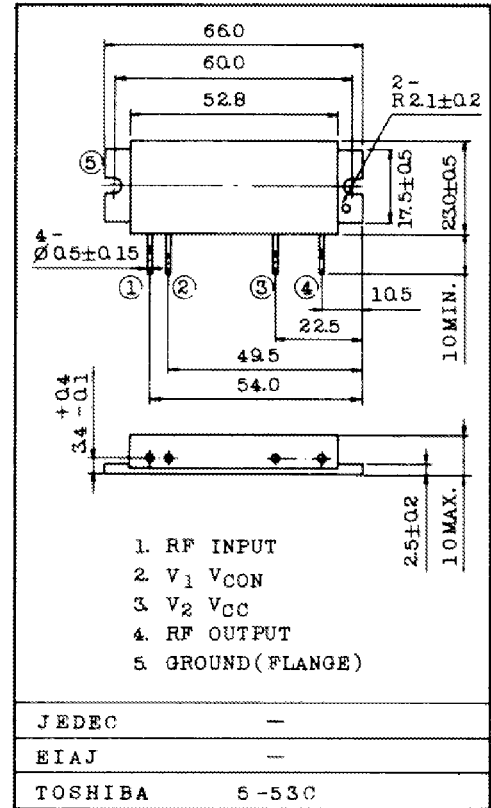
Absolute Maximum Ratings (Tc = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
DC Supply Voltage	V_{CC}	16	V
DC Supply Voltage	V_{CON}	16	V
RF Input Power	P_i	300	mW
Operating Case Temperature Range	$T_{c(opr)}$	-30 ~ 100	°C
Storage Temperature Range	T_{stg}	-40 ~ 110	°C

Electrical Characteristics (Tc= 25°C)

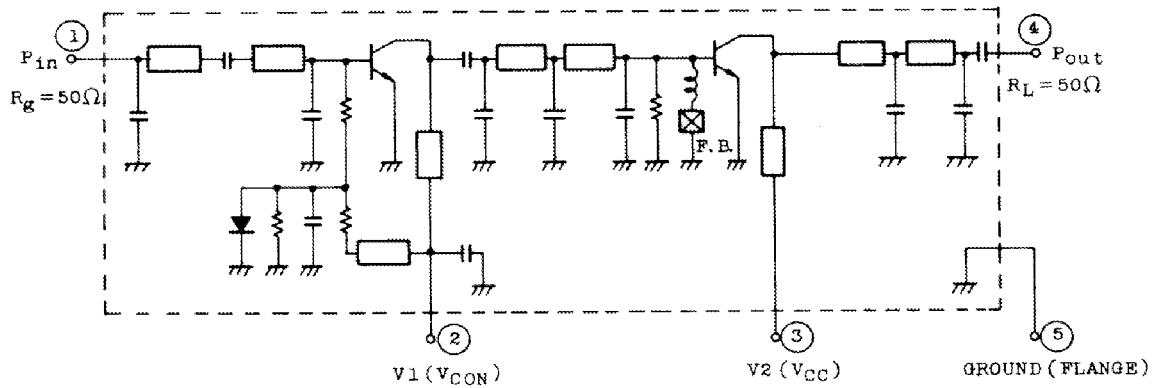
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Frequency Range	f_{range}	—	220	—	225	MHz
Output Power	P_o	$P_i = 200mW$ $V_{CC} = 12.5V, V_{CON} = 12.5V$ $Z_g = Z_1 = 50\Omega$	32	—	—	W
Power Gain	G_p		22.0	—	—	dB
Total Efficiency	η_T		45	—	—	%
Input VSWR	$VSWR_{in}$		—	1.5	2	—
Harmonics	HRM		—	—	-25	dB
Load Mismatch	—	$V_{CC} = 15V, V_{CON} = 12.5V$	No Degradation			—
		$P_o = 30W$				
		VSWR Load 20:1 all phase				
Stability	—	$V_{CC} = 12.5V, P_i = 200mW$	All spurious output than 60dB below desired signal			—
		$V_{CON} = 0 \sim 12.5V$				
		VSWR Load 3:1 all phase				

Unit in mm

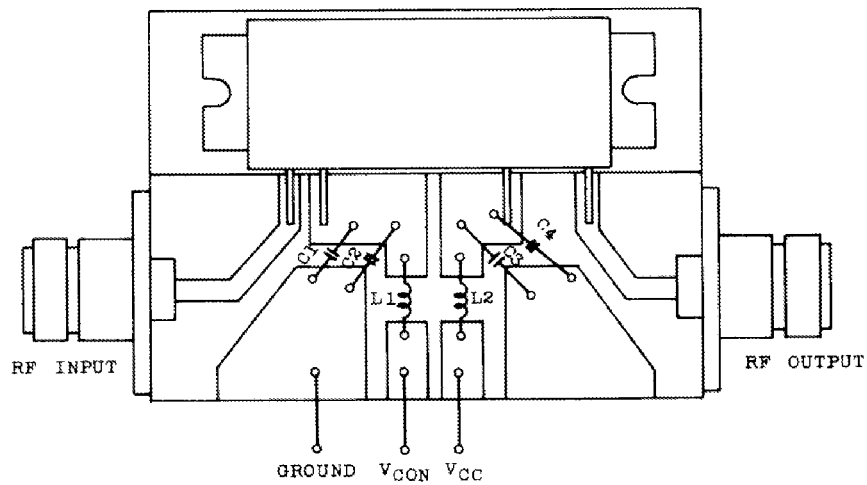


Weight: 35g

SCHEMATIC



TEST FIXTURE



C₁, C₃ : 15000PF

C₂, C₄ : 1μF

L₁, L₂ : Ø0.8 Au PLATED Cu WIRE 8T, 5ID

