

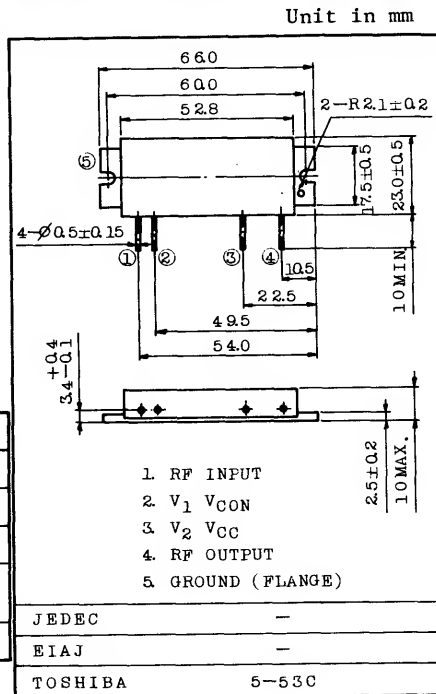
UHF POWER AMPLIFIER MODULE (HAM FM)

FEATURES:

- . Output Power : $P_o \cong 15W$
- . Minimum Gain : $G_p=18.7dB$
- . Efficiency : $\eta_T \cong 40\%$
- . 50Ω Input/Output Impedance
- . Guaranteed Stability

MAXIMUM RATINGS ($T_c=25^\circ C$)

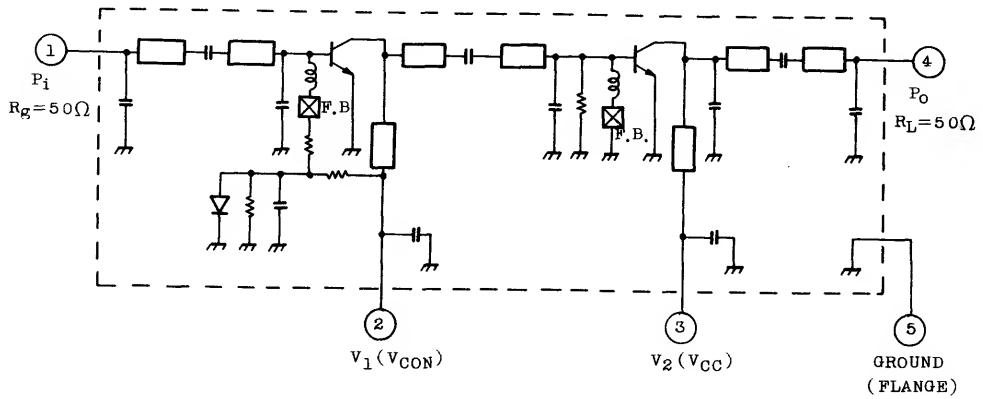
CHARACTERISTIC	SYMBOL	RATING	UNIT
DC Supply Voltage	V_{CC}	16	V
DC Supply Voltage	V_{CON}	16	V
RF Input Power	P_i	300	mW
Operating Case Temperature Range	$T_c(OP)$	-30 ~ 100	$^\circ C$
Storage Temperature Range	T_{stg}	-40 ~ 110	$^\circ C$



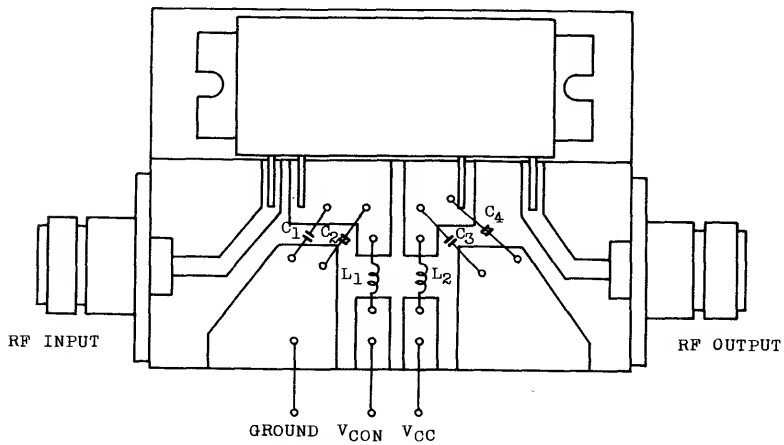
CHARACTERISTICS ($T_c=25^\circ C$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Frequency Range	f_{range}	-	430	-	450	MHz
Output Power	P_o	$P_i=200mW$ $V_{CC}=12.5V, V_{CON}=12.5V$ $Z_g=Z_i=50\Omega$	15	17	-	W
Power Gain	G_p		18.7	19.2	-	dB
Total Efficiency	η_T		40	50	-	%
Input VSWR	$VSWR_{in}$		-	1.5	2	-
Harmonics	HRM		-	-30	-25	dB
Load Mismatch	-	$V_{CC}=15V, V_{CON}=12.5V$ $P_i=200mW$ VSWR load 20:1 all phase	No Degradation			-
Stability	-	$V_{CC}=12.5V, P_i=200mW$ $V_{CON}=0 \sim 12.5V$ VSWR Load 3:1 all phase	All spurious output than 60dB below desired signal			-

SCHEMATIC



TEST MOUNT



C₁, C₃ : 15000pF

C₂, C₄ : 1μF

L₁, L₂ : Ø0.8 COPPER WIRE 8T, 5ID

