

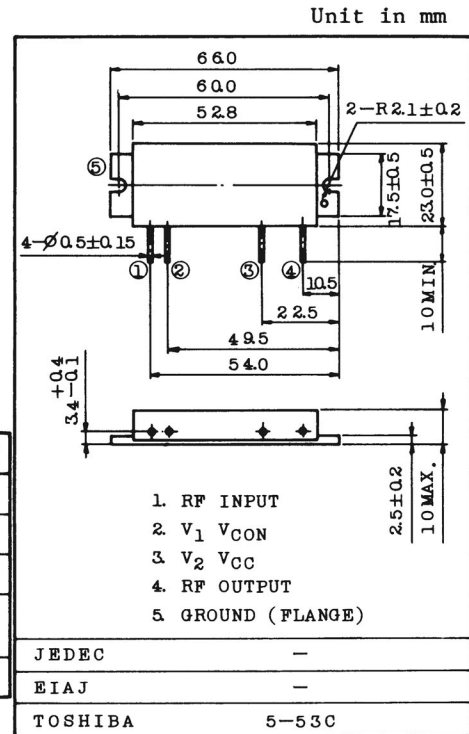
UHF POWER AMPLIFIER MODULE (HAM FM)

FEATURES:

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

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

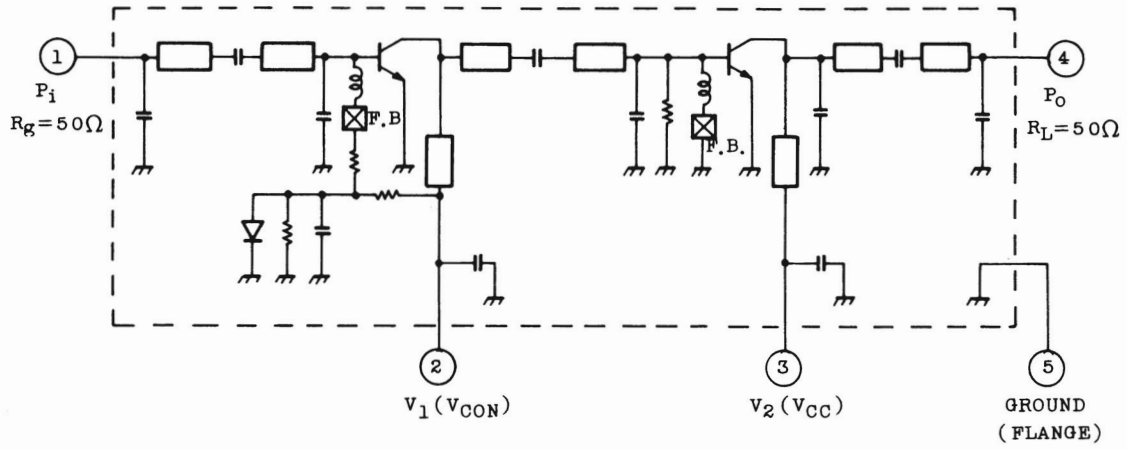
CHARACTERISTIC	SYMBOL	RATING	UNIT
DC Supply Voltage	$V_{CC}$	16	V
DC Supply Voltage	$V_{CON}$	16	V
RF Input Power	$P_i$	300	mW
Operating Case Temperature Range	$T_c(OP)$	-30 ~ 100	$^\circ C$
Storage Temperature Range	$T_{stg}$	-40 ~ 110	$^\circ C$



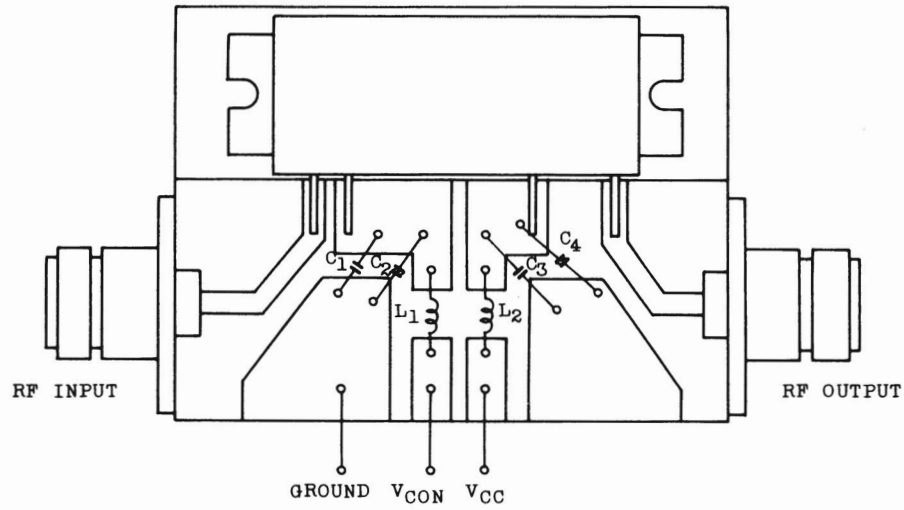
CHARACTERISTICS ( $T_c = 25^\circ C$ )

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Frequency Range	$f_{range}$	-	430	-	450	MHz
Output Power	$P_o$	$P_i = 200mW$ $V_{CC} = 12.5V, V_{CON} = 12.5V$ $Z_g = Z_1 = 50\Omega$	15	17	-	W
Power Gain	$G_p$		18.7	19.2	-	dB
Total Efficiency	$\eta_T$		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			-

SCHMATIC



TEST MOUNT



C<sub>1</sub>, C<sub>3</sub> : 15000pF

C<sub>2</sub>, C<sub>4</sub> : 1μF

L<sub>1</sub>, L<sub>2</sub> : ∅0.8 COPPER WIRE 8T, 5ID

