

# S-AU9

## RF POWER AMPLIFIER MODULE

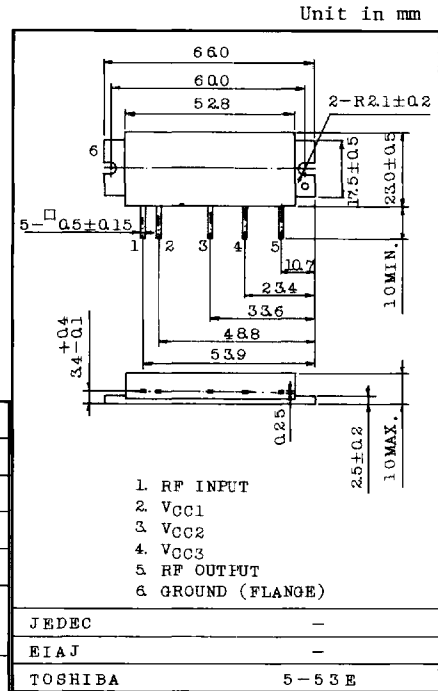
900MHz UHF POWER AMPLIFIER MODULE  
(MCA)

**FEATURES:**

- . Output Power :  $P_o \geq 14W$
- . Minimum Gain :  $G_p = 18.4dB$
- . Efficiency :  $\eta_T \geq 35\%$
- .  $50\Omega$  Input/Output Impedance
- . Guaranteed Stability

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
DC Supply Voltage	VCC1	16	V
DC Supply Voltage	VCC2	17	V
DC Supply Voltage	VCC3	17	V
RF Input Power	Pi	400	mW
Operating Case Temperature Range	T <sub>c(opr)</sub>	-30 ~ 100	°C
Storage Temperature Range	T <sub>stg</sub>	-40 ~ 110	°C

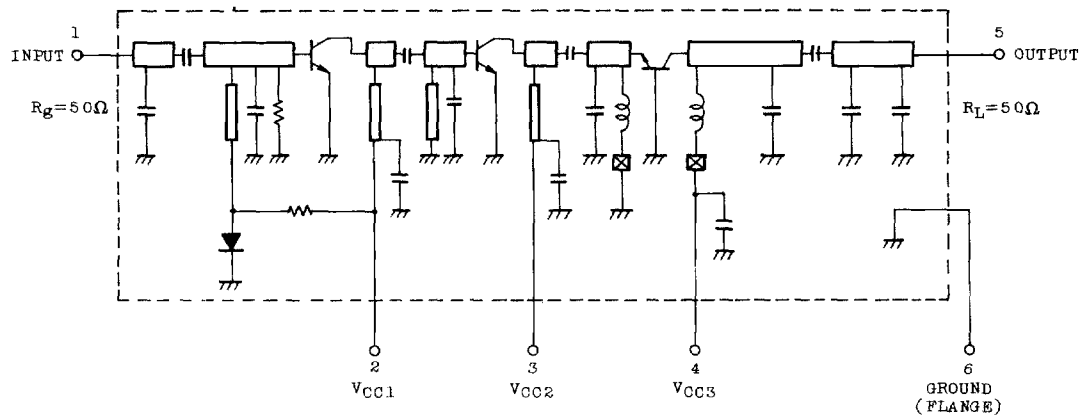


Weight : 35g

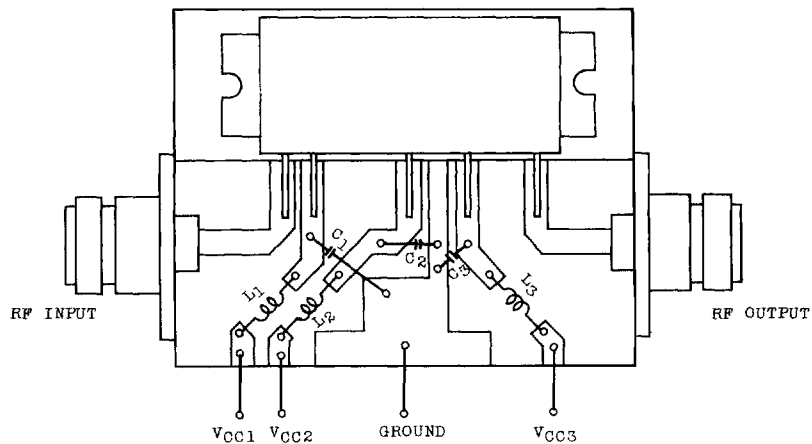
**ELECTRICAL CHARACTERISTICS ( $T_c = 25^\circ C$ )**

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Frequency Range	f <sub>range</sub>	-	905	-	915	MHz
Output Power	P <sub>o</sub>	P <sub>i</sub> =200mW, VCC1=VCC2=VCC3=12.5V Z <sub>g</sub> =Z <sub>L</sub> =50Ω	14	-	-	W
Power Gain	G <sub>p</sub>		18.4	-	-	dB
Total Efficiency	η <sub>T</sub>		35	-	-	%
Input VSWR	VSWR <sub>in</sub>		-	1.5	2	-
Harmonics	HRM		-	-	-30	dB
Load Mismatch	-	VCC1=12.5V, VCC2=VCC3=15V P <sub>i</sub> =200mW VSWR load 20:1 all phase	No Degradation		-	-
Stability	-	VCC2=VCC3=12.5V, VCC1=5~12.5V P <sub>i</sub> =200mW VSWR load 3:1 all phase	All spurious output than 60dB below desired signal		-	-

SCHEMATIC



TEST MOUNT



C1, C2, C3 : 1500pF, 10μF PARALLEL

L1, L2, L3 : φ0.8Ag PLATED WIRE, 8T 5ID

