TOSHIBA RF POWER AMPLIFIER MODULE

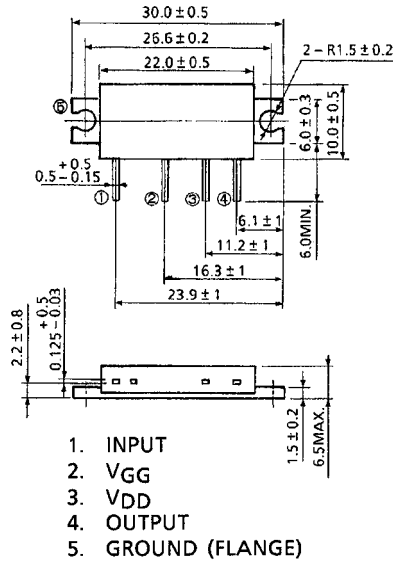
S−AU68M

UHF BAND FM POWER AMPLIFIER MODULE

Unit in mm

MAXIMUM RATINGS (Tc=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
DC Supply Voltage	V_{DD}	17	V
DC Supply Voltage	V_{GG}	6	V
Input Power	Pi	50	mW
Output Power	Po	12	W
Total Current	I_T	3	A
Operating Case Temperature Range	$T_{c\ (opr)}$	−30~100	°C
Storage Temperature Range	T_{stg}	−40~110	°C



JEDEC	—
EIAJ	—
TOSHIBA	5−23E

Weight: 3.5g

000707EAA1

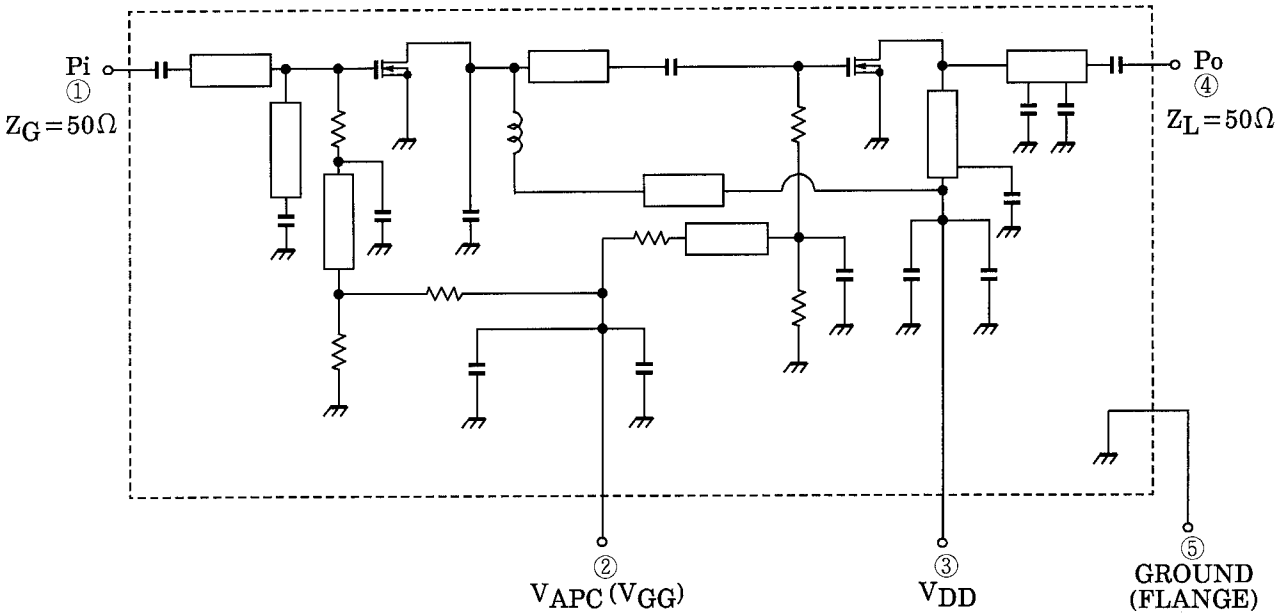
ELECTRICAL CHARACTERISTICS (Tc=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Frequency Range	f_{range}	—		450	—	470	MHz
Output Power (1)	Po (1)	V_{GG} = 4V, Pi = 20mW Z_G=Z_L=50Ω	V_{DD}=9.6V	7	—	—	W
Output Power (2)	Po (2)		V_{DD}=6.0V	2.7	—	—	
Total Efficiency	η_T	V_{DD} = 9.6V, Pi = 20mW P_o = 7W (V_{GG} = adjust) Z_G = Z_L = 50Ω		40	—	—	%
Input VSWR	VSWRin			—	—	2.5	—
Harmonics	HRM			—	—	−25	dB
Load Mismatch	—	V_{DD} = 15V, Pi = 20mW Po = 7W (V_{GG} = adjust) VSWR LOAD 20: 1 ALL PHASE		No Degradation			—
Stability	—	V_{DD} = 3.5~15.7V, V_{GG} = 0~4V Po<12W, Pi = 20mW VSWR LOAD 3: 1 ALL PHASE		All spurious output than 60dB below desired signal			—

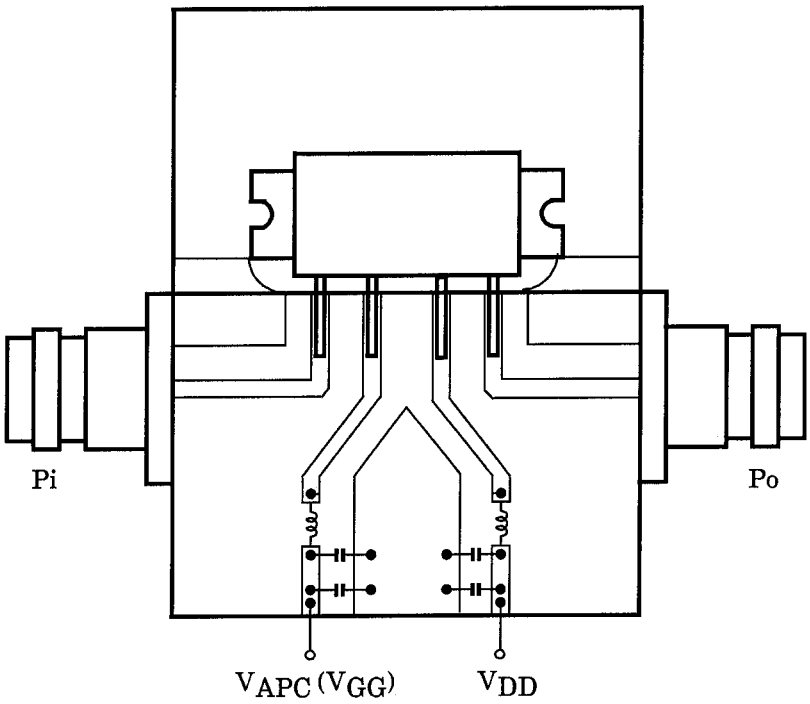
CAUTION

- This product has intersetting cap. Please pay attention for exceeding stress and foreign matter in your application. And not to take away the cap.
- Do not intermingle with normal industrial or domestic waste.
- This product is electrostatic sensitivity, please handle with caution.

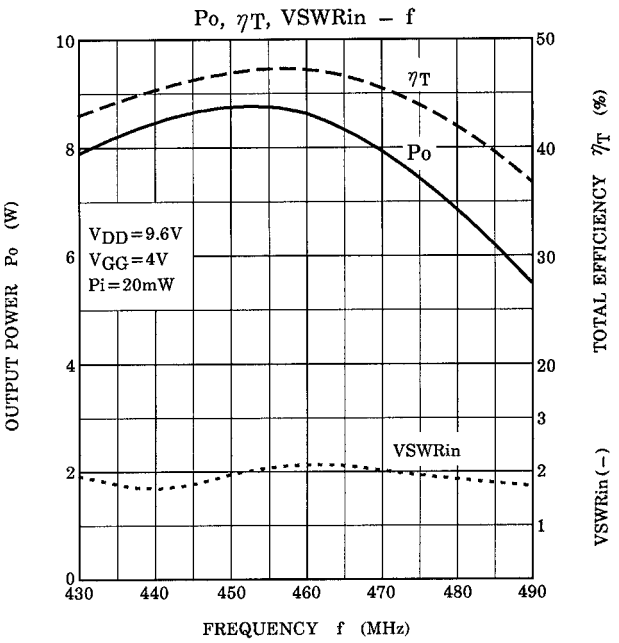
SCHEMATIC

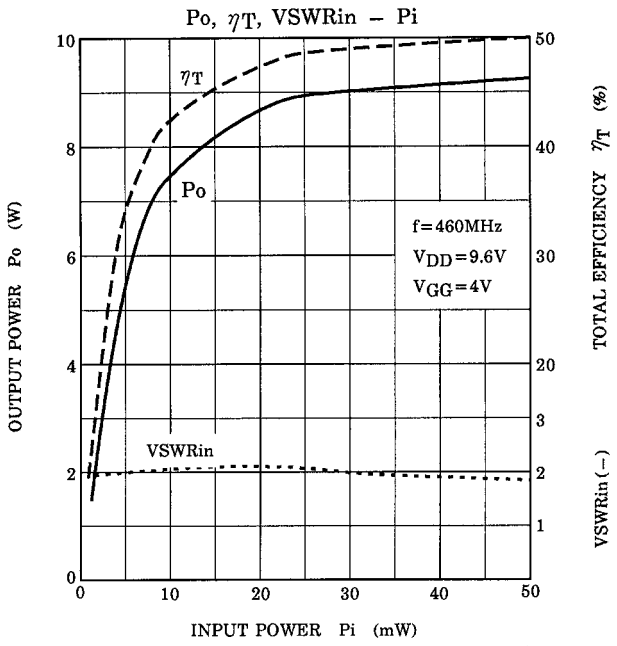


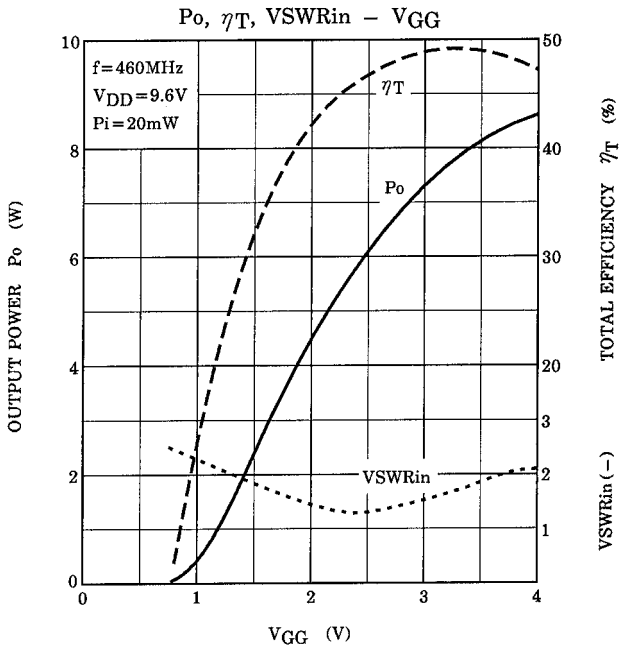
TEST FIXTURE



C : 10000pF, 10μF PARALLEL
L : ϕ0.5, 3ID, 5T ENAMEL WIRE







CAUTION

These are only typical curves and devices are not necessarily guaranteed at these curves.