

TOSHIBA RF POWER AMPLIFIER MODULE

S-AU50H

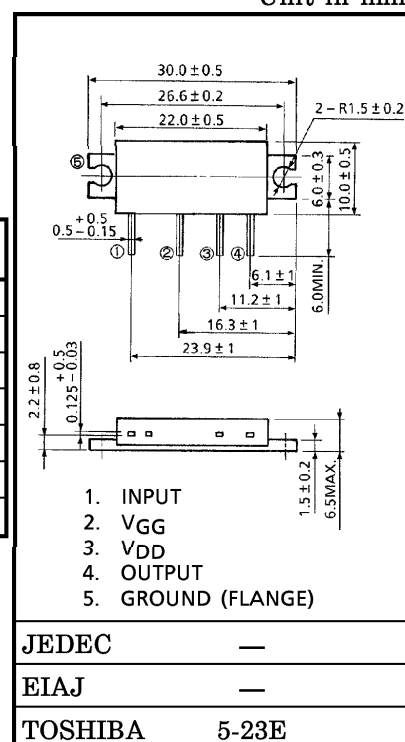
UHF BAND FM POWER AMPLIFIER MODULE

HAND-HELD TRANSCEIVER

Unit in mm

MAXIMUM RATINGS (T_c = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
DC Supply Voltage	V _{DD}	17	V
DC Supply Voltage	V _{GG}	6	V
Input Power	P _i	150	mW
Output Power	P _o	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

ELECTRICAL CHARACTERISTICS (T_c = 25°C)

Weight : 3.5g

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Frequency Range	f _{range}	—	470	—	520	MHz
Output Power	P _o	V _{DD} = 9.6V, V _{GG} = 4V P _i = 50mW, Z _G = Z _L = 50Ω	6.5	—	—	W
Power Gain	G _p		21.1	—	—	dB
Total Efficiency	η _T		40	—	—	%
Input VSWR	VSWR _{in}		—	—	4.5	—
Harmonics	HRM		—	—	−30	dBc
Load Mismatch	—	V _{DD} = 15V, P _i = 50mW P _o = 7W (V _{GG} = adjust) VSWR LOAD 20 : 1 ALL PHASE	No Degradation			—
Stability	—	V _{DD} = 7.5~11.5V, V _{GG} = 0~4V P _i = 50mW VSWR LOAD 3 : 1 ALL PHASE	All spurious output than 60dB below desired signal			—

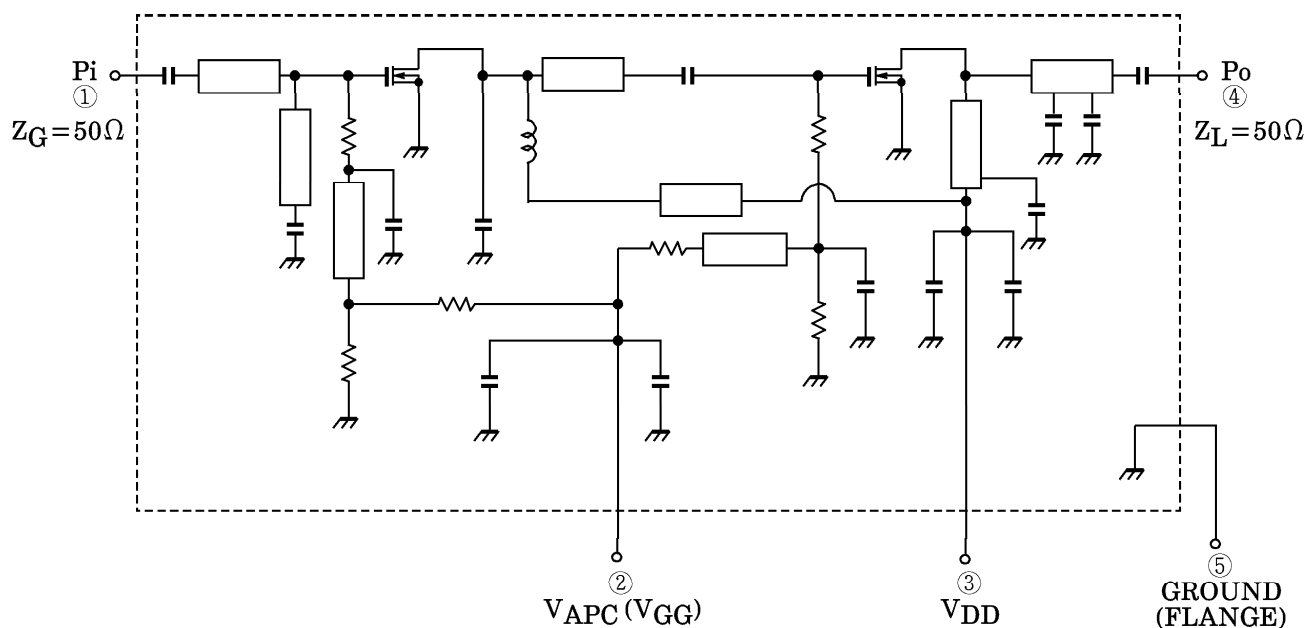
CAUTION

- 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.

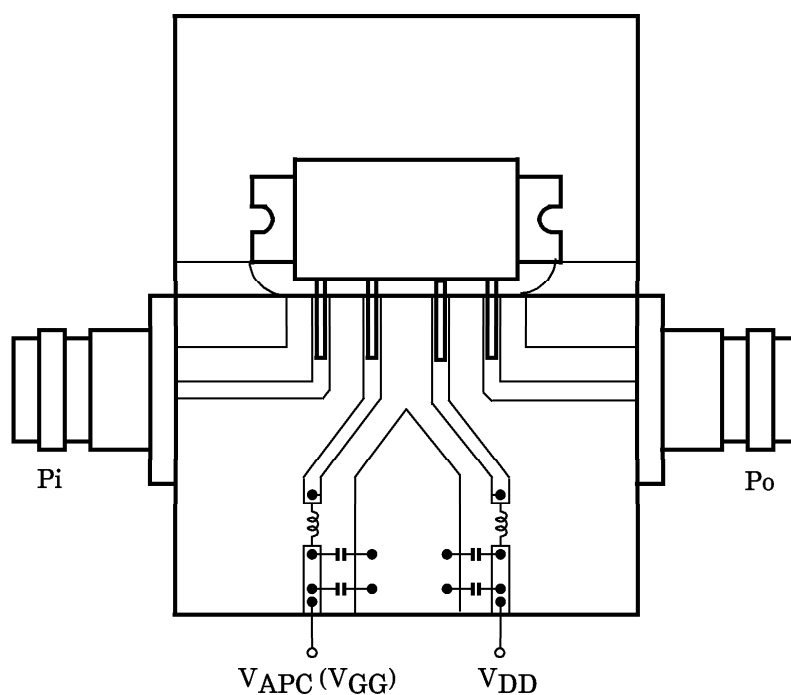
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SCHEMATIC



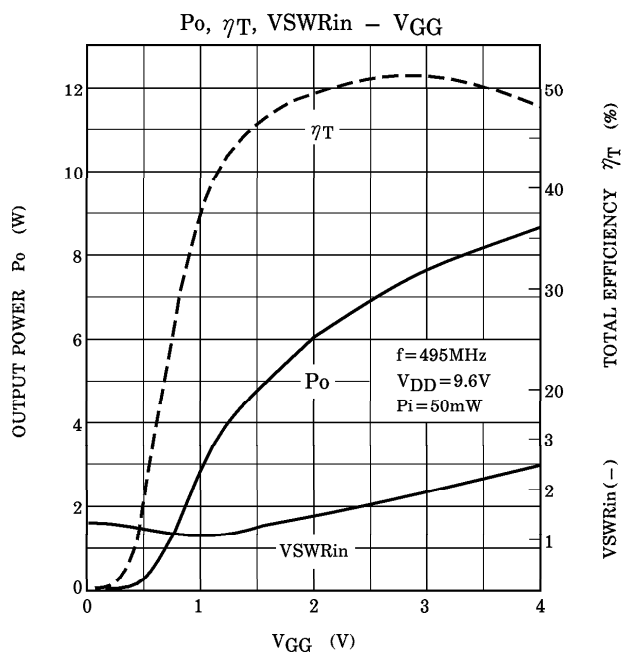
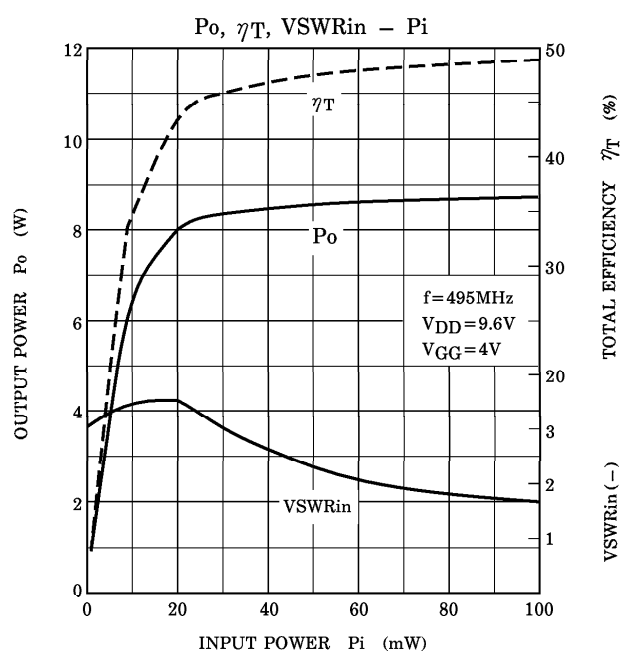
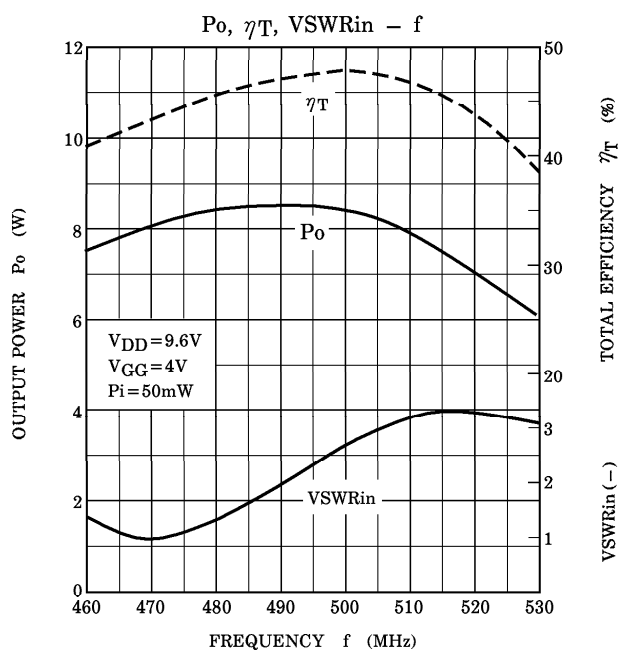
TEST FIXTURE



C : 10000pF, 10 μ F PARALLEL
L : ϕ 0.5, 3ID, 5T ENAMEL WIRE

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CAUTION

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