

TOSHIBA RF POWER AMPLIFIER MODULE

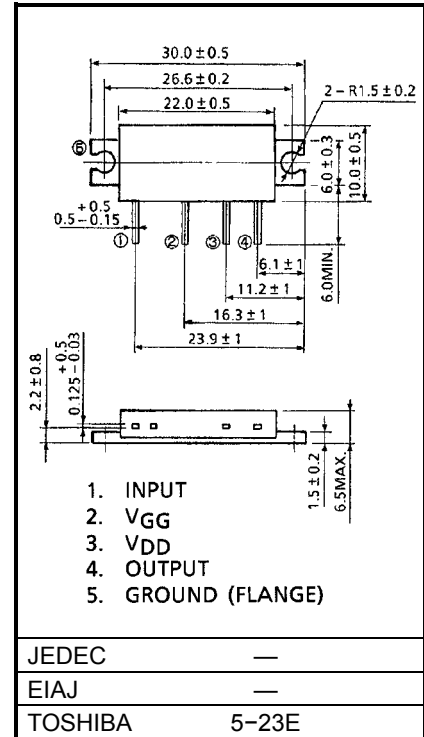
S-AU50M

UHF BAND FM POWER AMPLIFIER MODULE
HAND-HELD TRANSCEIVER

Unit: 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	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



Weight: 3.5g

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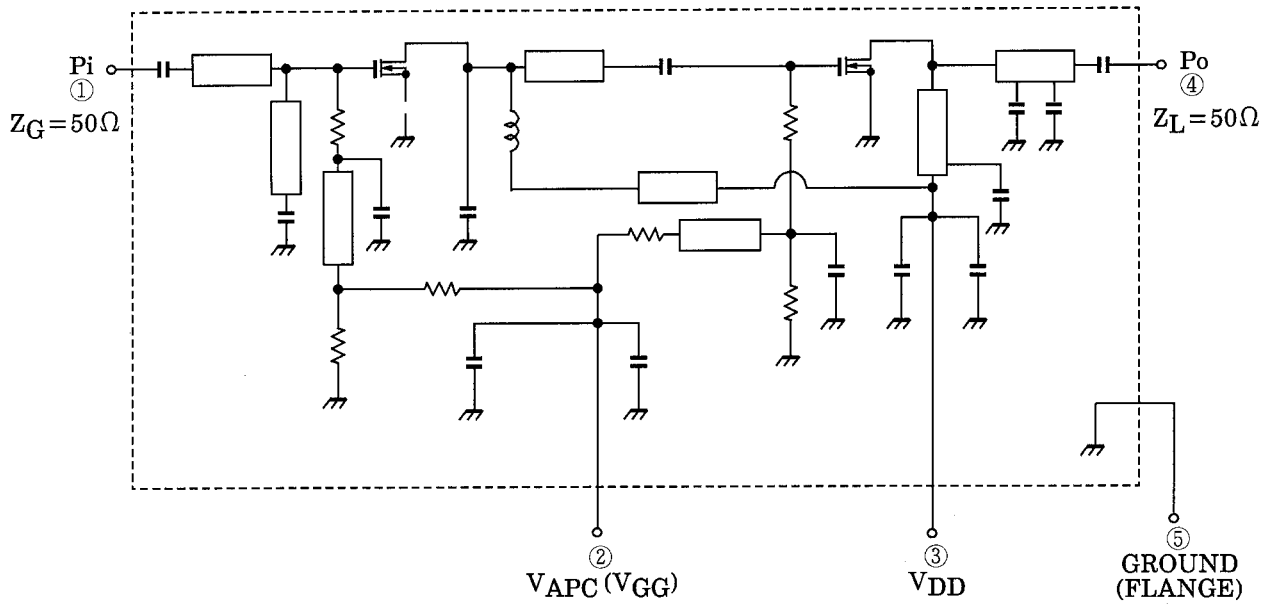
ELECTRICAL CHARACTERISTICS (Tc = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP.	MAX	UNIT
Frequency Range	f _{range}	—	430	—	480	MHz
Output Power	P _o	V _{DD} = 9.6V, V _{GG} = 4V P _i = 50mW, Z _G = Z _L = 50Ω	7	—	—	W
Power Gain	G _p		21.4	—	—	dB
Total Efficiency	η _T		40	—	—	%
Input VSWR	VSWR _{in}		—	—	3.0	—
Harmonics	HRM		—	—	-25	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			—

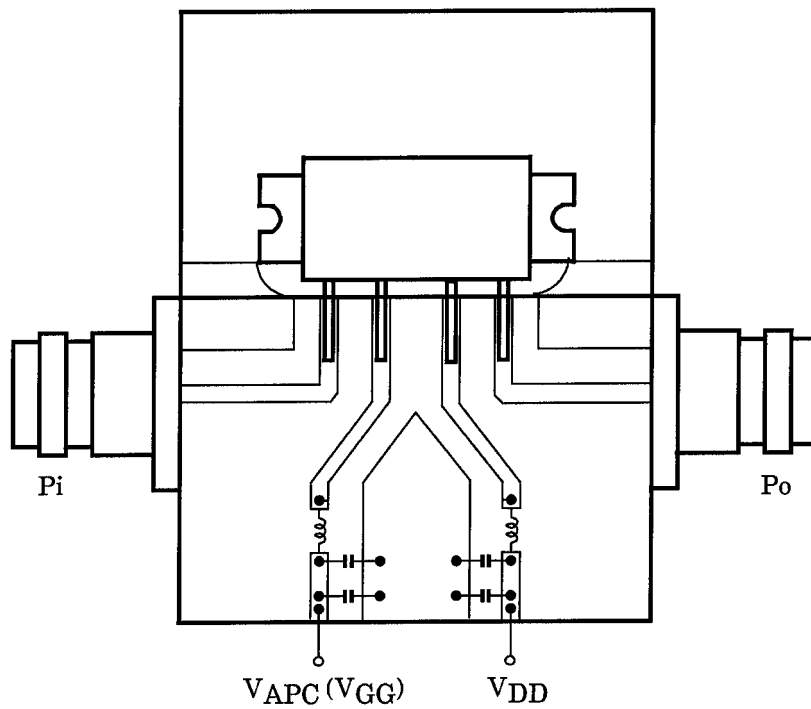
CAUTION

- 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.

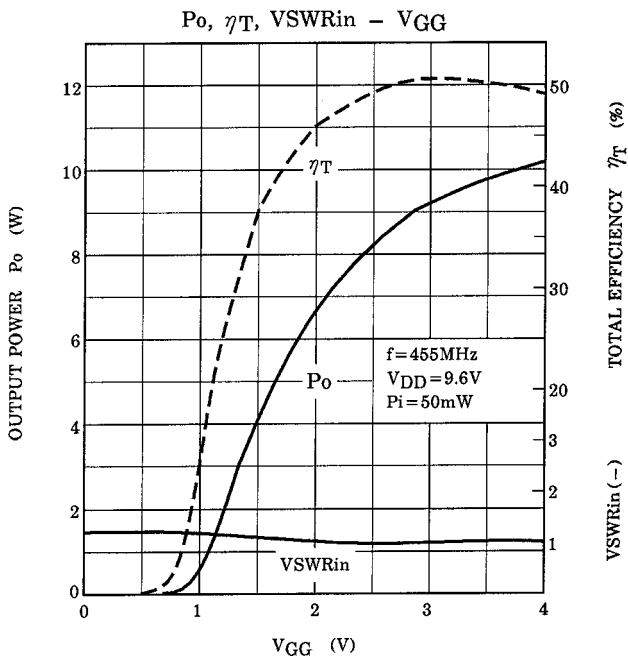
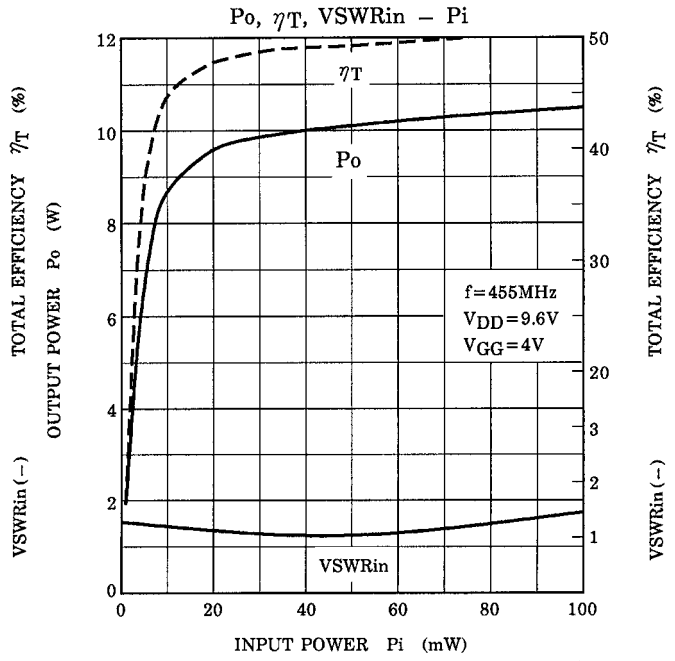
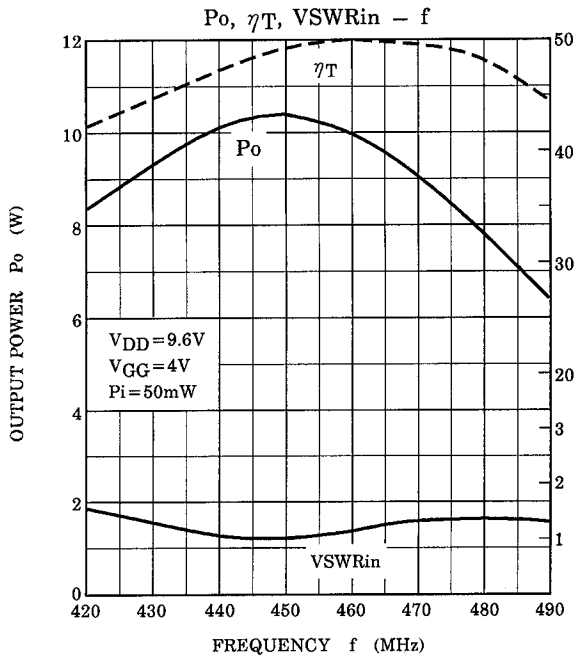
SCHEMATIC



TEST FIXTURE



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



CAUTION

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