

TOSHIBA RF POWER AMPLIFIER MODULE

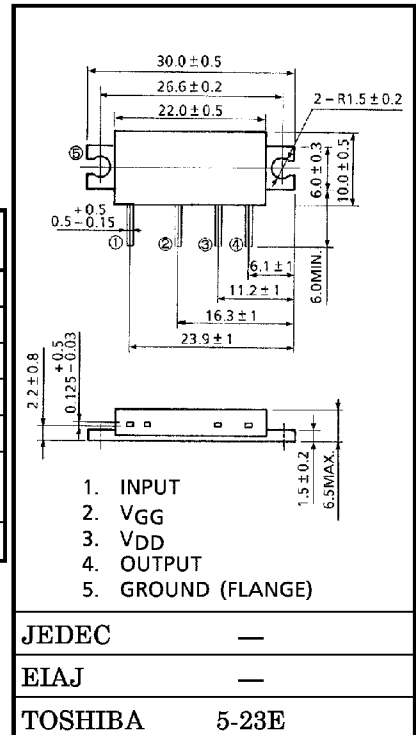
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VHF BAND HAM FM RF POWER AMPLIFIER MODULE
HAND-HELD TRANSCEIVER

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	50	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}		144	—	148	MHz
Output Power	P _o	V _{DD} = 9.6V V _{GG} = 4V P _i = 20mW Z _G = Z _L = 50Ω	7	—	—	W
Power Gain	G _p		25.4	—	—	dB
Total Efficiency	η _T		50	—	—	%
Input VSWR	VSWR _{in}		—	—	2.5	—
Harmonics	HRM		—	—	-15	dB
Load Mismatch	—	V _{DD} = 15V, P _i = 20mW 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 = 20mW VSWR LOAD 6 : 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.

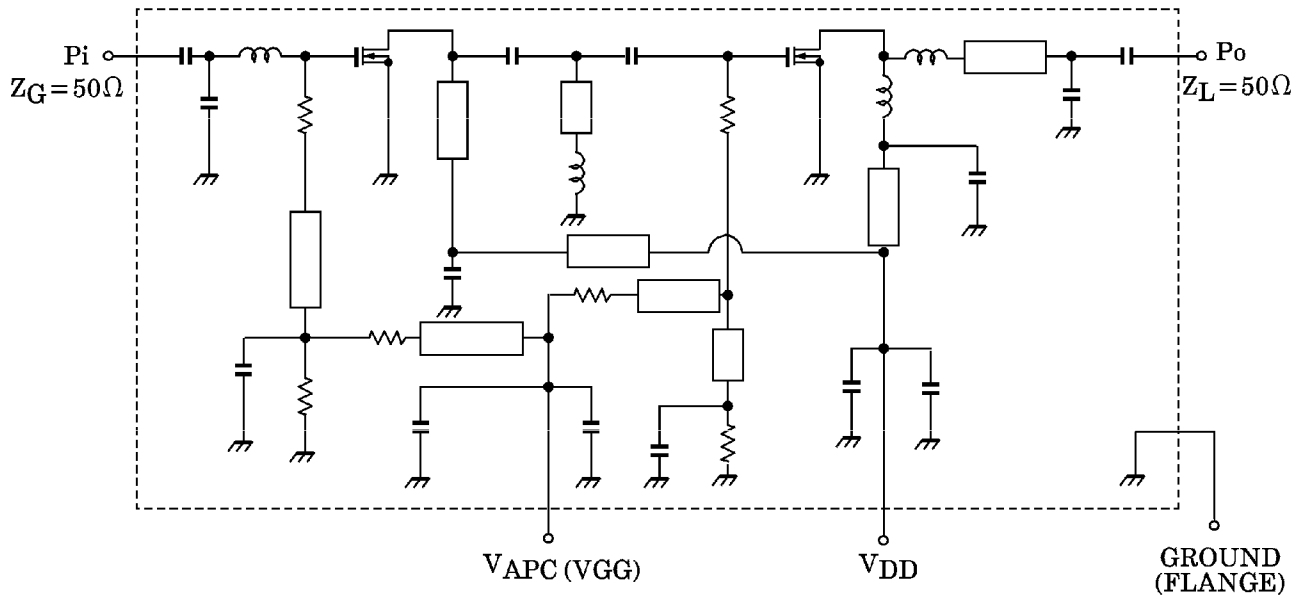
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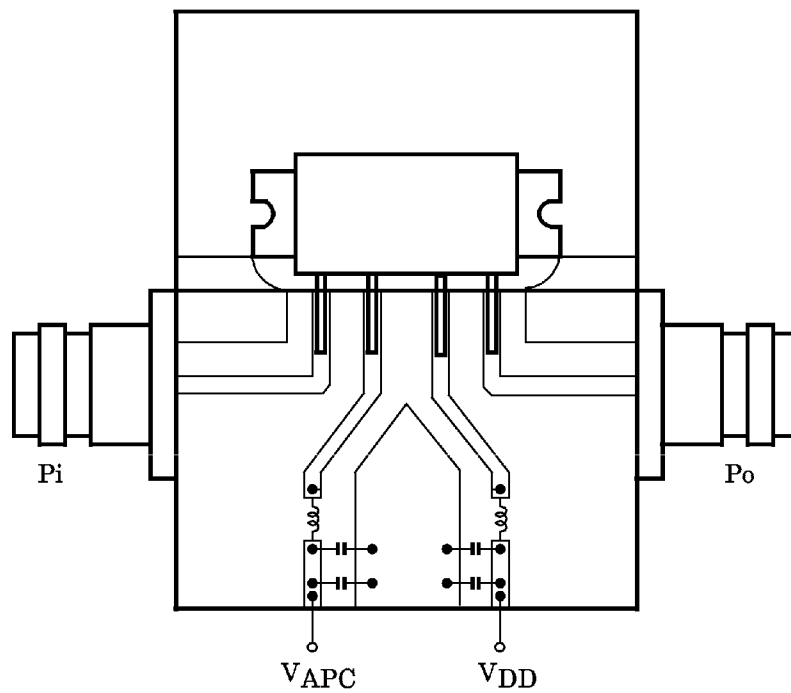
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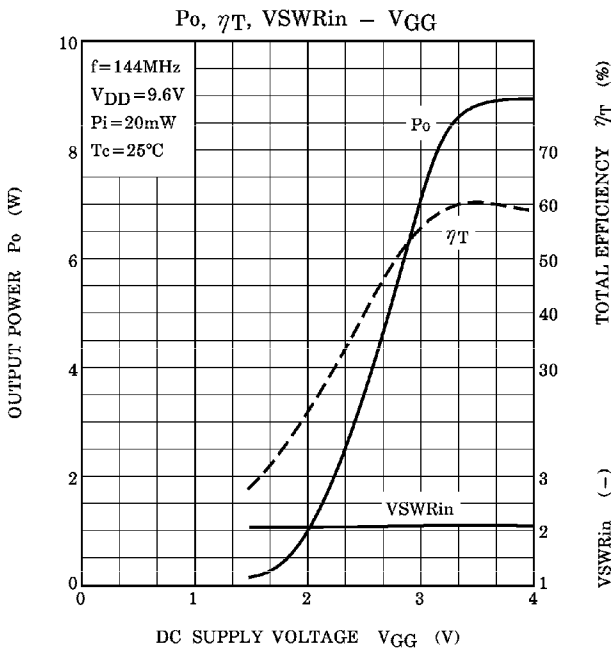
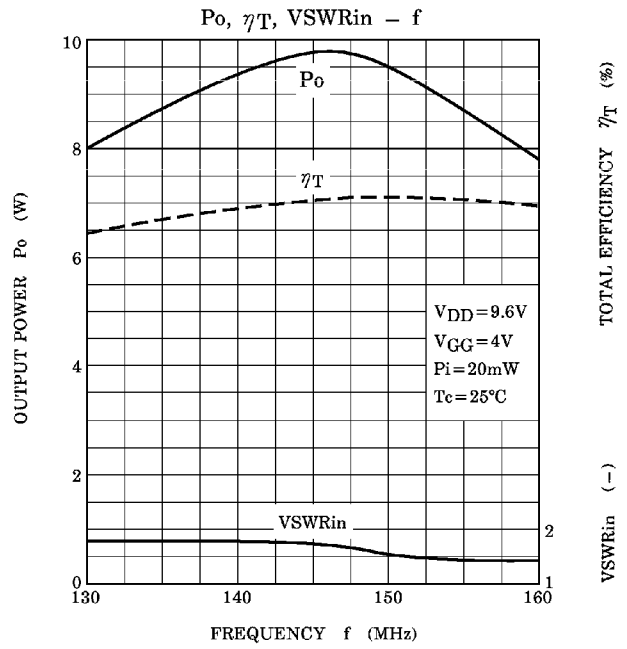
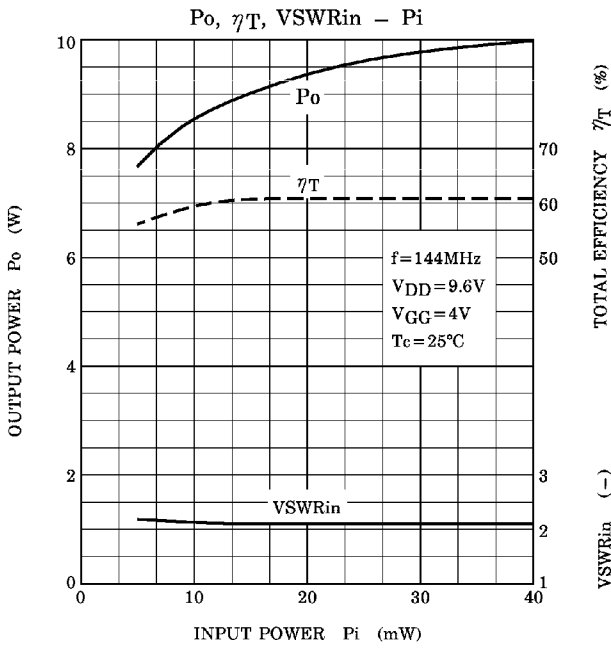
SCHEMATIC



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.