

TOSHIBA RF POWER AMPLIFIER MODULE

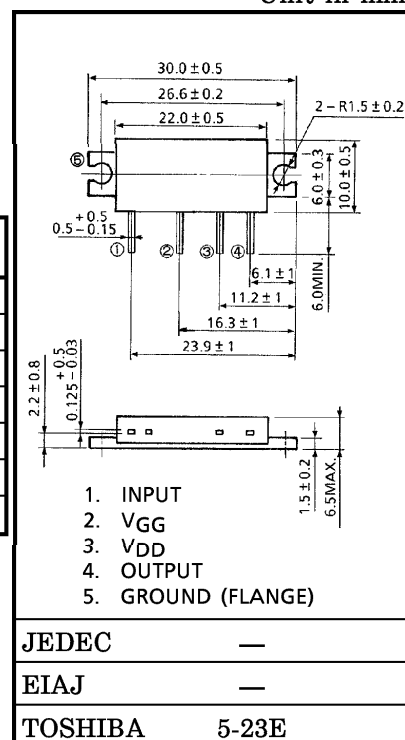
S - A U 6 8 L

UHF BAND FM POWER AMPLIFIER MODULE

Unit in mm

MAXIMUM RATINGS ($T_c = 25^\circ\text{C}$)

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	$T_{c(opr)}$	$-30 \sim 100$	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	$-40 \sim 110$	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_c = 25^\circ\text{C}$)

Weight : 3.5g

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Frequency Range	f_{range}	—	400	—	420	MHz
Output Power (1)	$P_o(1)$	$V_{GG}=4V$, $P_i=20mW$	7	—	—	W
Output Power (2)	$P_o(2)$	$Z_G=Z_L=50\Omega$	2.7	—	—	
Total Efficiency	η_T	$V_{DD}=9.6V$, $P_i=20mW$	35	—	—	%
Input VSWR	VSWR _{in}	$P_o=7W$ ($V_{GG}=\text{adjust}$)	—	—	5.0	—
Harmonics	HRM	$Z_G=Z_L=50\Omega$	—	—	-25	dB
Load Mismatch	—	$V_{DD}=15V$, $P_i=20mW$ $P_o=7W$ ($V_{GG}=\text{adjust}$) VSWR LOAD 20 : 1 ALL PHASE	No Degradation			—
Stability	—	$V_{DD}=3.5 \sim 15.7V$, $V_{GG}=0 \sim 4V$ $P_o < 12W$, $P_i=20mW$ VSWR LOAD 2 : 1 ALL PHASE	All spurious output than 60dB below desired signal			—

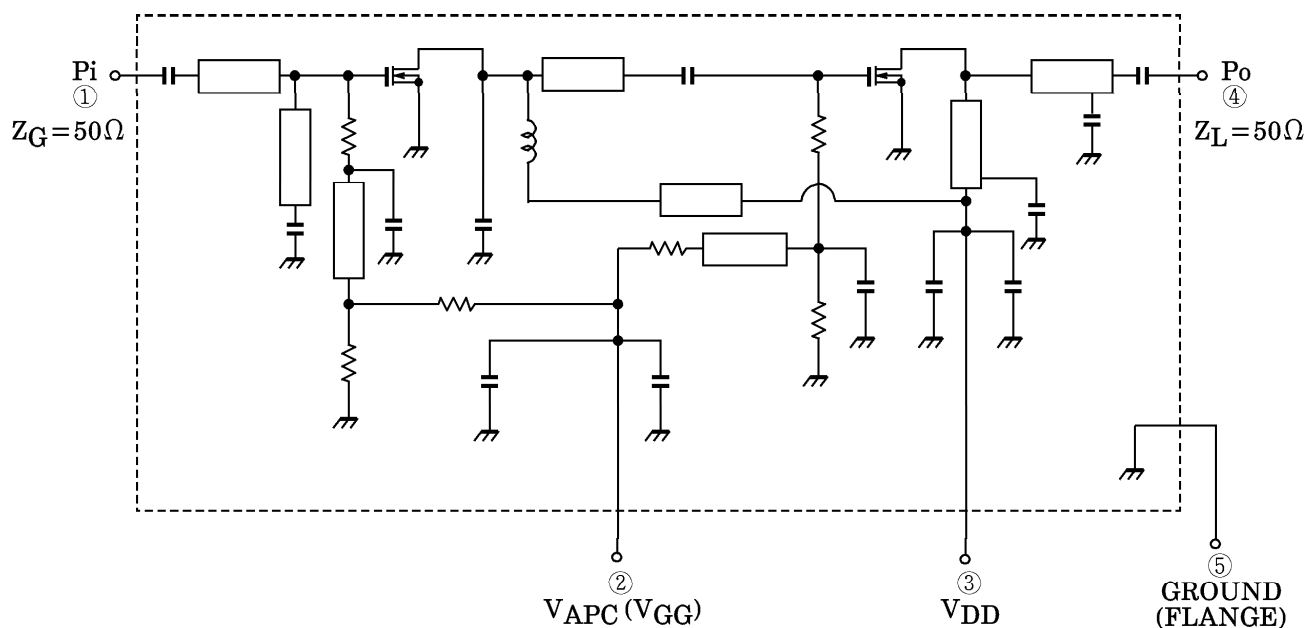
CAUTION

- 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.

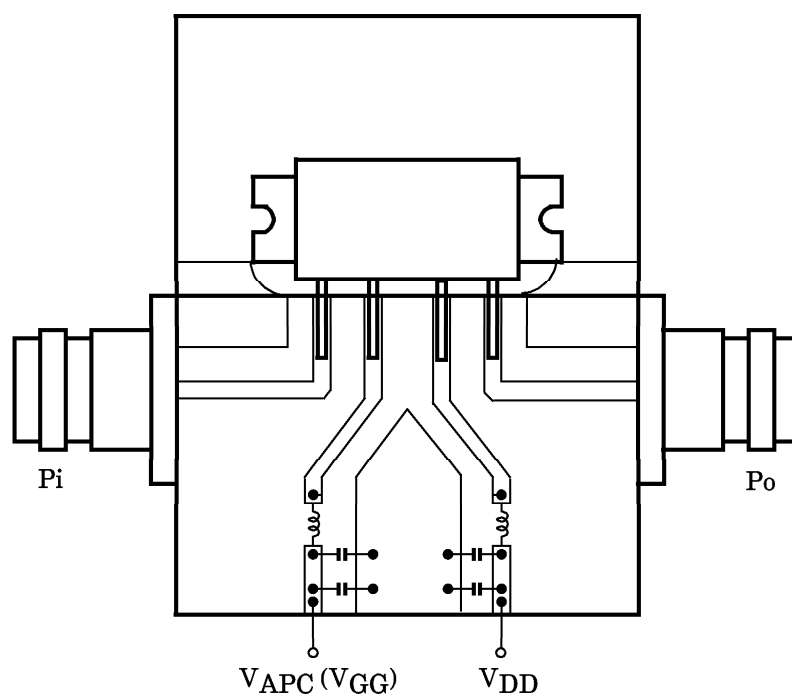
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SCHEMATIC



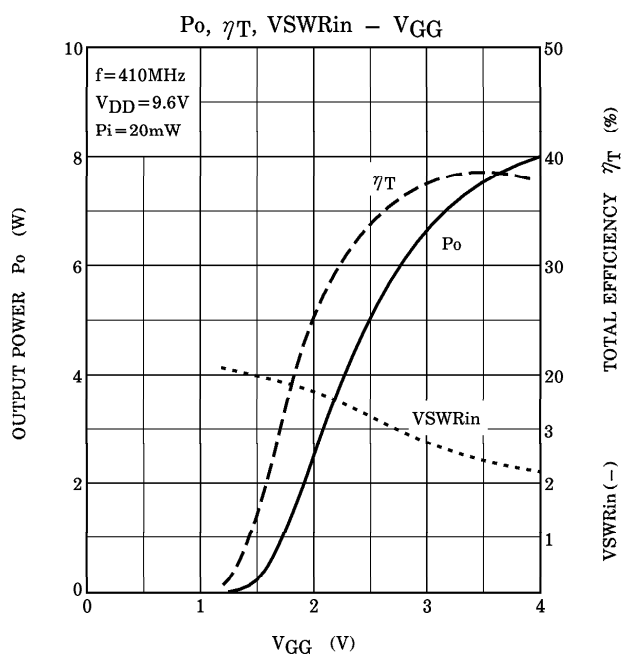
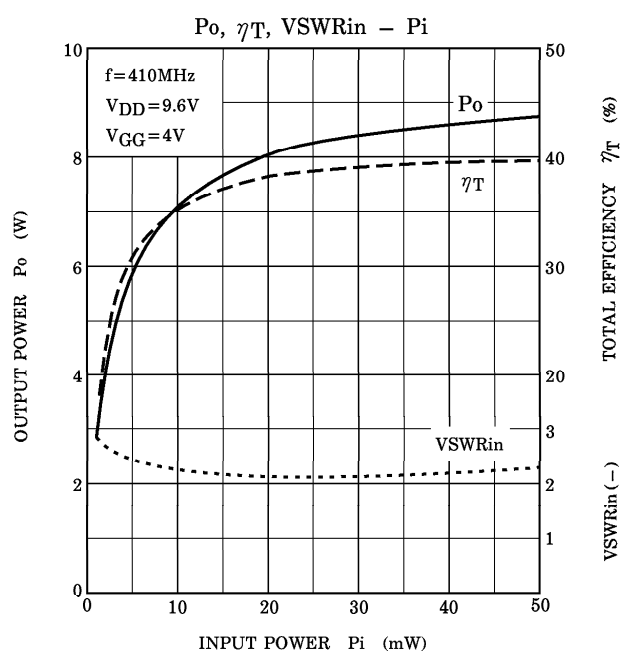
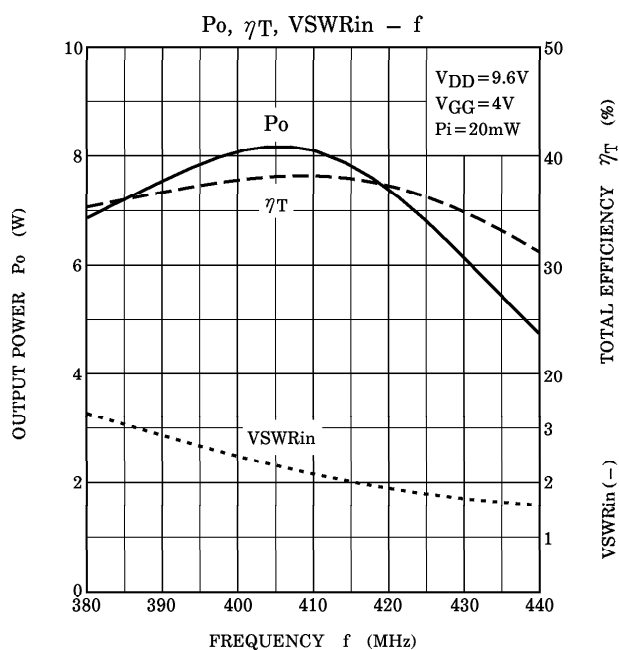
TEST FIXTURE



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.