

TOSHIBA RF POWER AMPLIFIER MODULE

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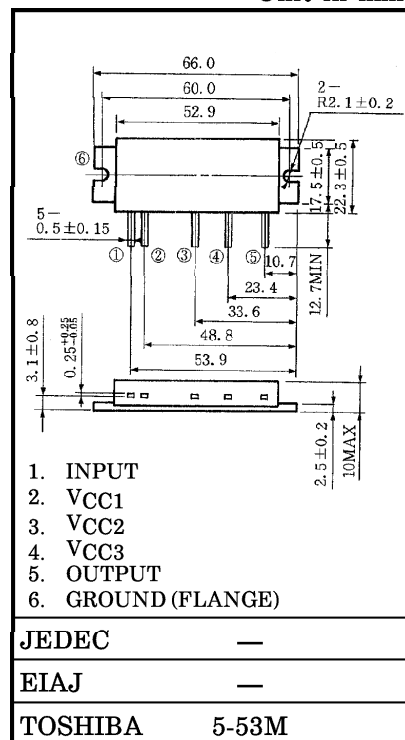
JAPAN MULTI CHANNEL ACCESS SYSTEM
(FM) RF POWER AMPLIFIER MODULE

Unit in mm

- High Gain : $G_p = 18.1\text{dB (Min)}$
- High Efficiency : $\eta_T = 35\% \text{ (Min)}$

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
DC Supply Voltage	VCC1	16	V
DC Supply Voltage	VCC2	17	V
DC Supply Voltage	VCC3	17	V
Input Power	Pi	600	mW
Operating Case Temperature Range	T _{c (opr)}	-30~100	°C
Storage Temperature Range	T _{stg}	-40~110	°C



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

Weight : 35g

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Frequency Range	f _{range}	—	889	—	915	MHz
Output Power	P _o	Pi = 200mW VCC1 = 11V VCC2 = VCC3 = 13.5V ZG = ZL = 50Ω	13	—	—	W
Power Gain	G _p		18.1	—	—	dB
Total Efficiency	η _T		35	—	—	%
Input VSWR	VSWR _{in}		—	1.5	2.5	—
Harmonics	HRM		—	—	-30	dB
Load Mismatch	—	P _o = 13W (VCC1 = adjust) VCC2 = VCC3 = 15V Pi = 200mW VSWR load 20 : 1 all phase	No Degradation			—
Stability	—	VCC2 = VCC3 = 13.5V VCC1 = 0~11V Pi = 200mW VSWR load 3 : 1 all phase	All spurious output than 60dB below desired signal			—

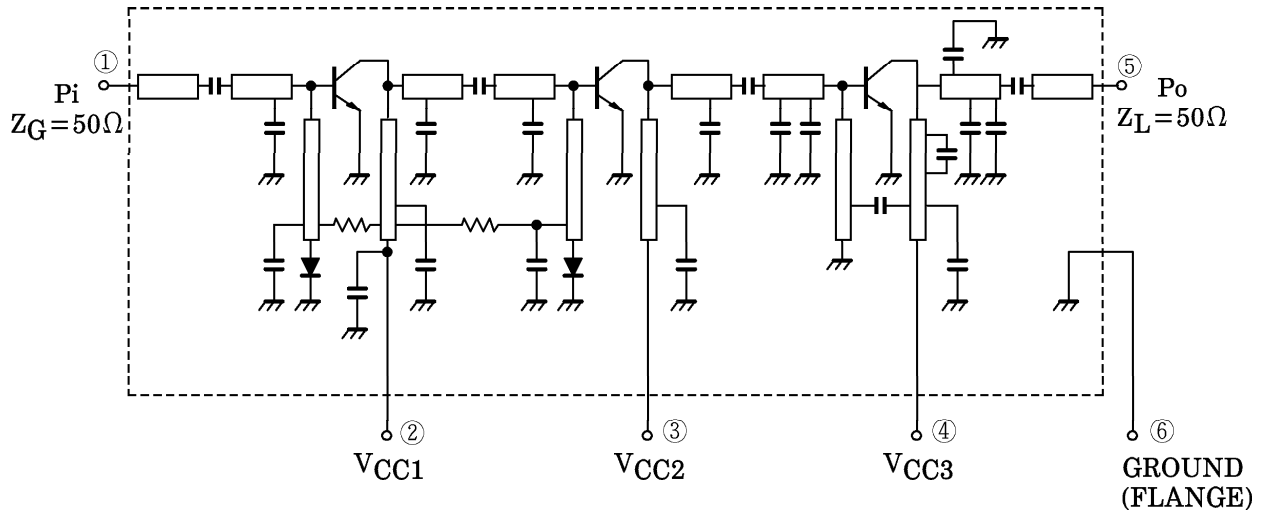
CAUTION

- This product has intersetting cap. Please pay attention for exceeding stress and foreign matter in your application. And not to take away the cap.
- Beryllia Ceramics is used in this product. The dust or vapor can be dangerous to humans. Do not break, cut, crush or dissolve chemically. Dispose of this product properly according to law. Do not intermingle with normal industrial or domestic waste.

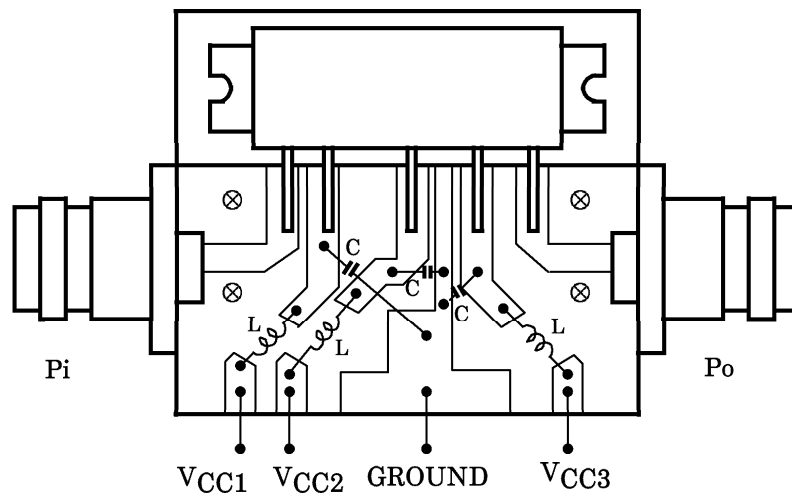
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SCHEMATIC



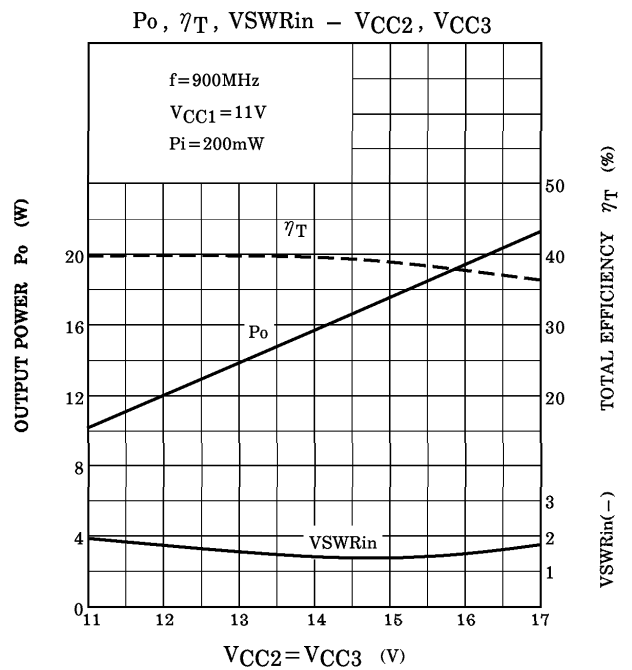
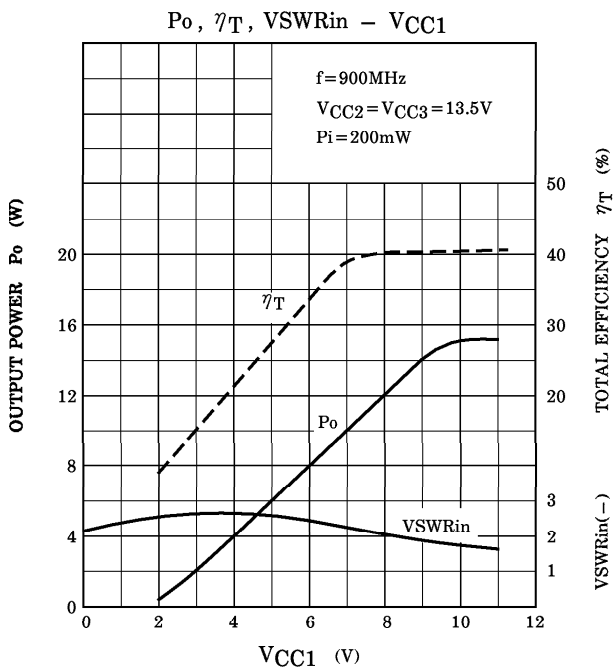
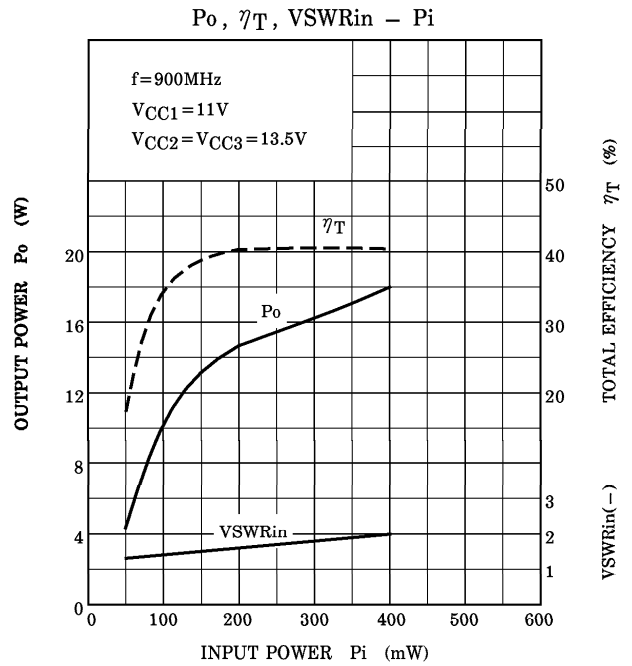
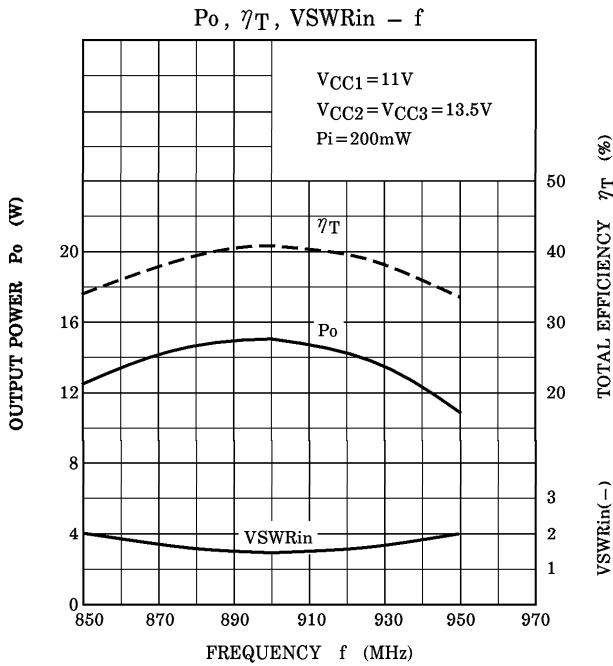
TEST FIXTURE



C : 1500pF, 10 μ F PARALLEL
 L : ϕ 0.8 ENAMEL WIRE 8T, 5ID

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CAUTION

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