

TOSHIBA RF POWER AMPLIFIER MODULE

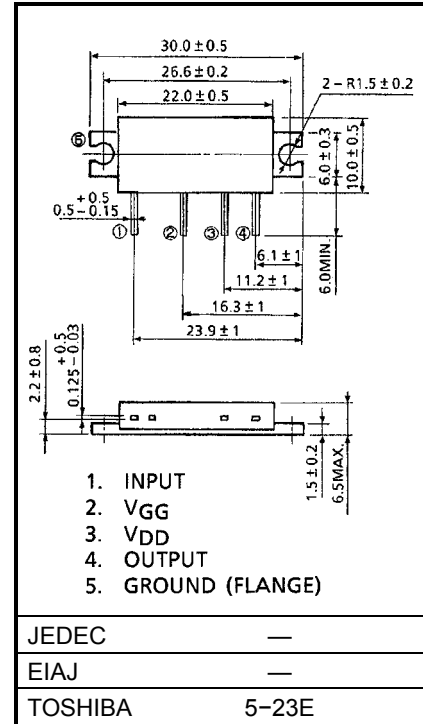
# S-AU68L

UHF BAND FM POWER AMPLIFIER MODULE

Unit in mm

**MAXIMUM RATINGS (T<sub>c</sub> = 25°C)**

CHARACTERISTIC	SYMBOL	RATING	UNIT
DC Supply Voltage	V <sub>DD</sub>	17	V
DC Supply Voltage	V <sub>GG</sub>	6	V
Input Power	P <sub>i</sub>	50	mW
Output Power	P <sub>o</sub>	12	W
Total Current	I <sub>T</sub>	3	A
Operating Case Temperature Range	T <sub>c (opr)</sub>	-30~100	°C
Storage Temperature Range	T <sub>stg</sub>	-40~110	°C



Weight: 3.5g

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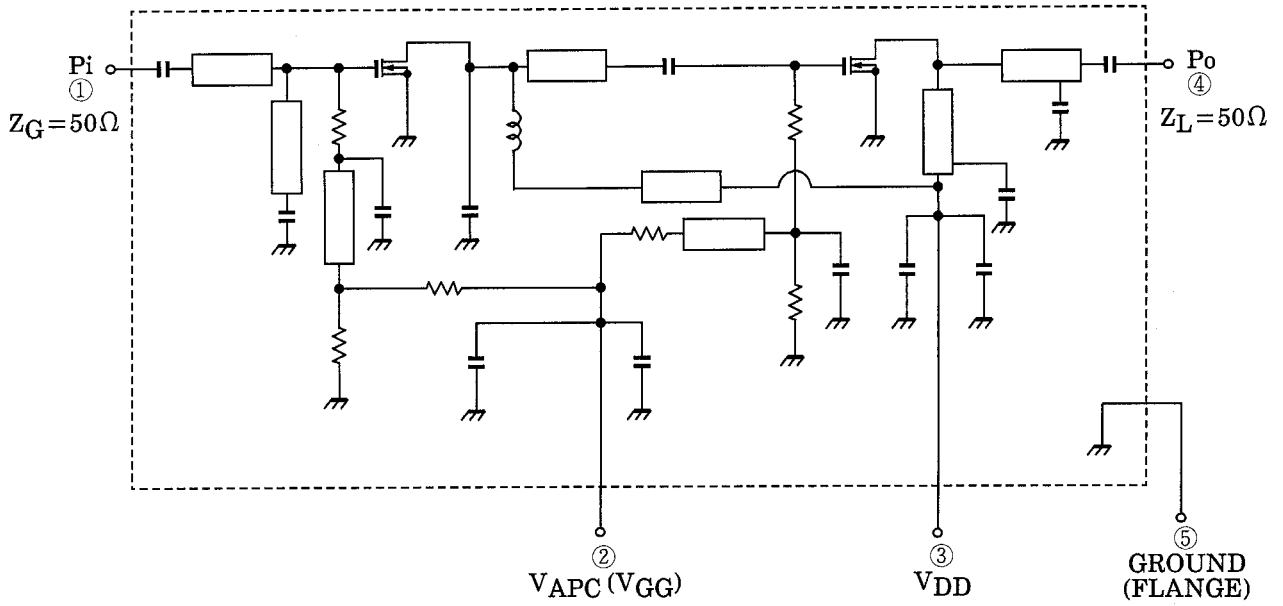
## ELECTRICAL CHARACTERISTICS (Tc = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Frequency Range	f <sub>range</sub>	—	400	—	420	MHz	
Output Power (1)	P <sub>o</sub> (1)	V <sub>GG</sub> = 4V, P <sub>i</sub> = 20mW Z <sub>G</sub> = Z <sub>L</sub> = 50Ω	V <sub>DD</sub> = 9.6V	7	—	—	W
Output Power (2)	P <sub>o</sub> (2)		V <sub>DD</sub> = 6.0V	2.7	—	—	
Total Efficiency	η <sub>T</sub>	V <sub>DD</sub> = 9.6V, P <sub>i</sub> = 20mW P <sub>o</sub> = 7W (V <sub>GG</sub> = adjust) Z <sub>G</sub> = Z <sub>L</sub> = 50Ω		35	—	—	%
Input VSWR	VSWR <sub>in</sub>			—	—	5.0	—
Harmonics	HRM			—	—	-25	dB
Load Mismatch	—	V <sub>DD</sub> = 15V, P <sub>i</sub> = 20mW P <sub>o</sub> = 7W (V <sub>GG</sub> = adjust) VSWR LOAD 20: 1 ALL PHASE	No Degradation			—	
Stability	—	V <sub>DD</sub> = 3.5~15.7V, V <sub>GG</sub> = 0~4V P <sub>o</sub> < 12W, P <sub>i</sub> = 20mW VSWR LOAD 2: 1 ALL PHASE	All spurious output than 60dB below desired signal			—	

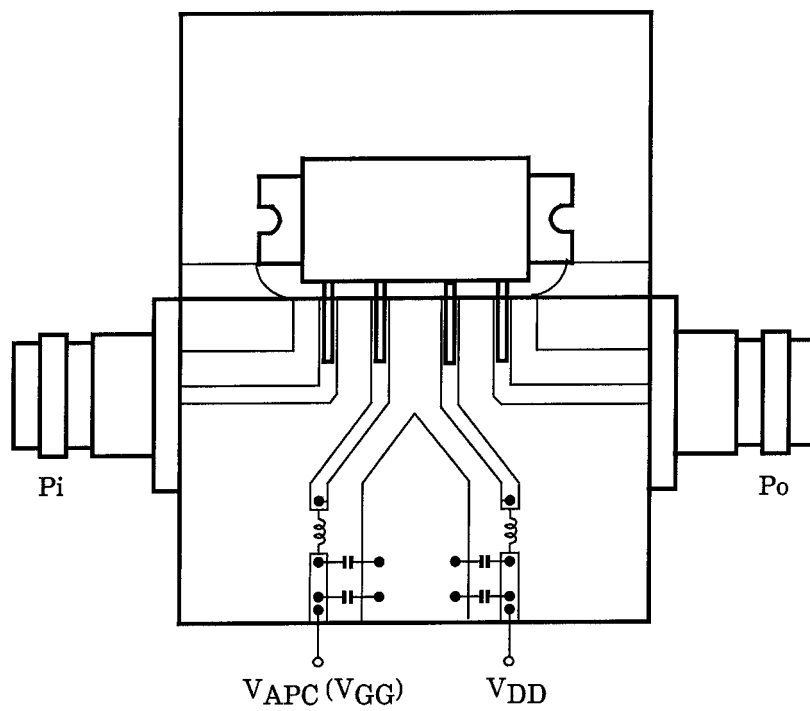
## CAUTION

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.

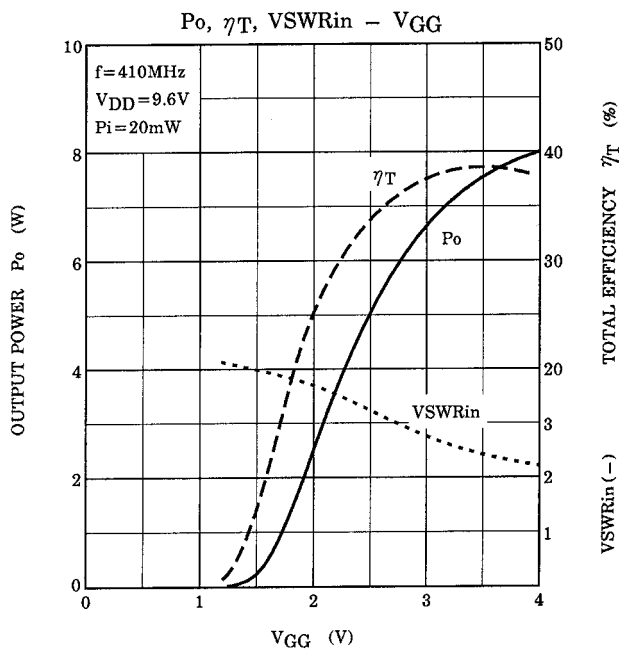
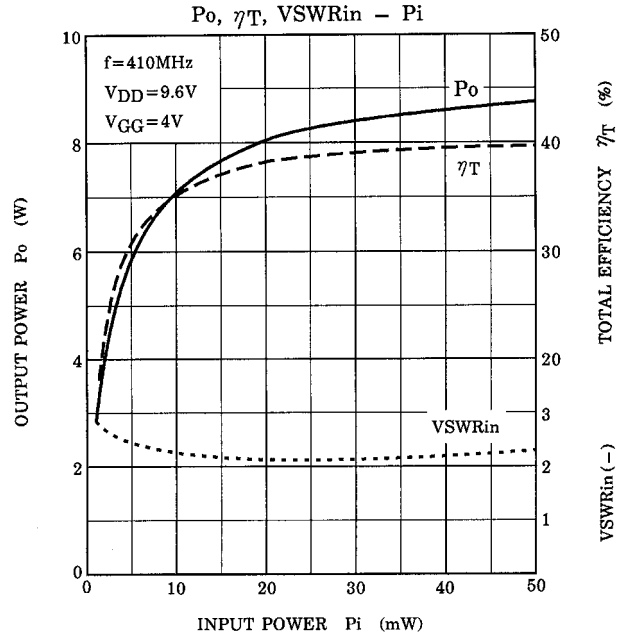
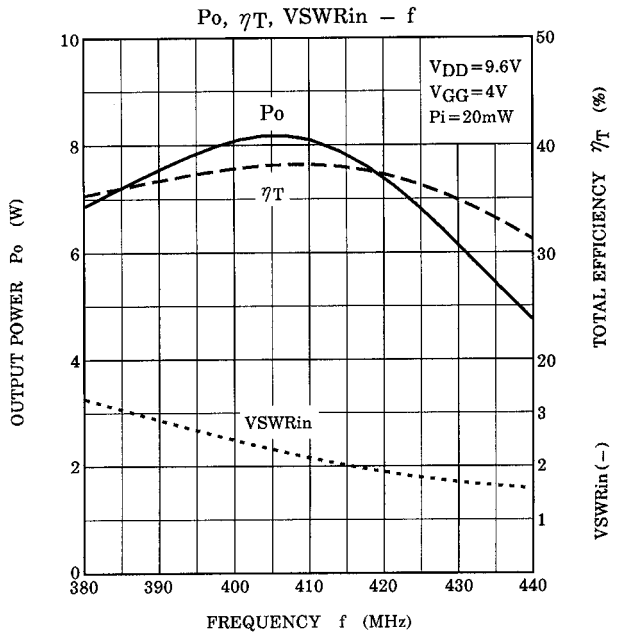
**SCHEMATIC**



**TEST FIXTURE**



C : 10000pF, 10 $\mu$ F PARALLEL  
 L :  $\phi$ 0.5, 3ID, 5T ENAMEL WIRE



**CAUTION**

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