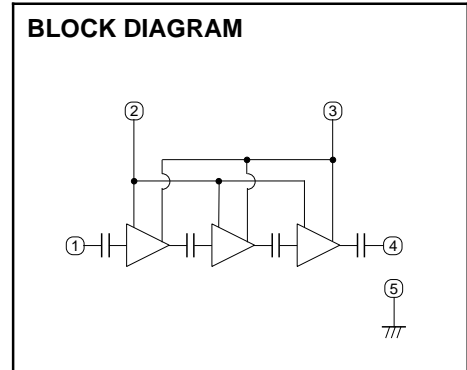
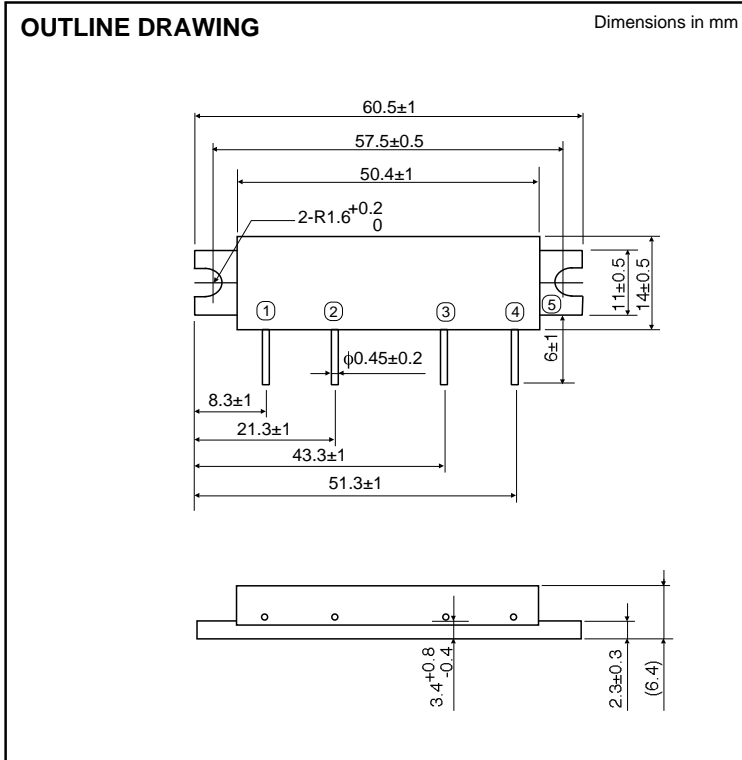


MITSUBISHI RF POWER MODULE
M68701

SILICON MOS FET POWER AMPLIFIER, 820-851MHz, 6W, FM PORTABLE RADIO



PIN:
 ① Pin : RF INPUT
 ② V_{GG} : GATE BIAS SUPPLY
 ③ V_{DD} : DRAIN BIAS SUPPLY
 ④ P_O : RF OUTPUT
 ⑤ GND: FIN

ABSOLUTE MAXIMUM RATINGS (T_c=25°C unless otherwise noted)

Symbol	Parameter	Conditions	Ratings	Unit
V _{DD}	Supply voltage	V _{GG} 3.5V, Z _G =Z _L =50	17	V
V _{GG}	Gate bias voltage		5.5	V
P _{in}	Input power	f=820-851MHz, Z _G =Z _L =50	10	mW
P _O	Output power	f=820-851MHz, Z _G =Z _L =50	10	W
T _{C (OP)}	Operation case temperature	f=820-851MHz, Z _G =Z _L =50	-30 to +100	°C
T _{stg}	Storage temperature		-40 to +100	°C

Note. Above parameters are guaranteed independently.

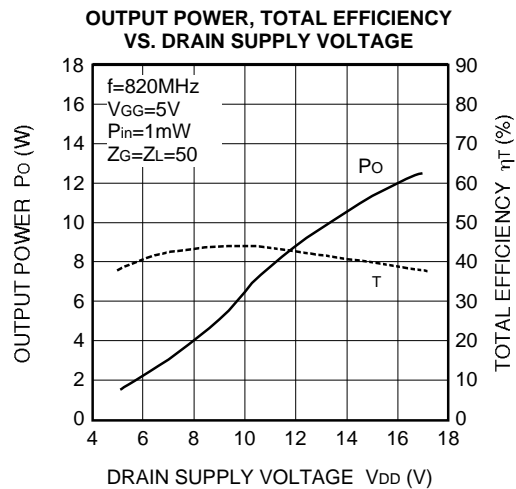
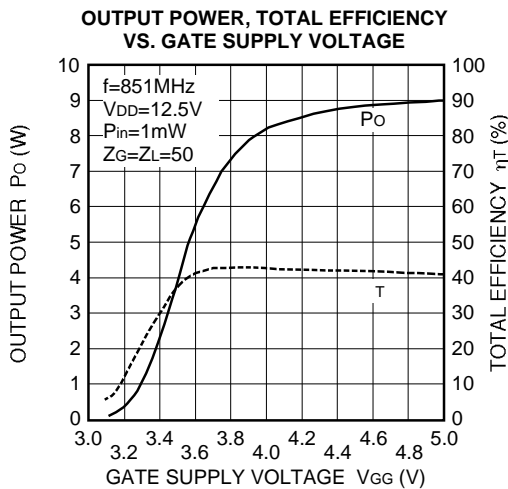
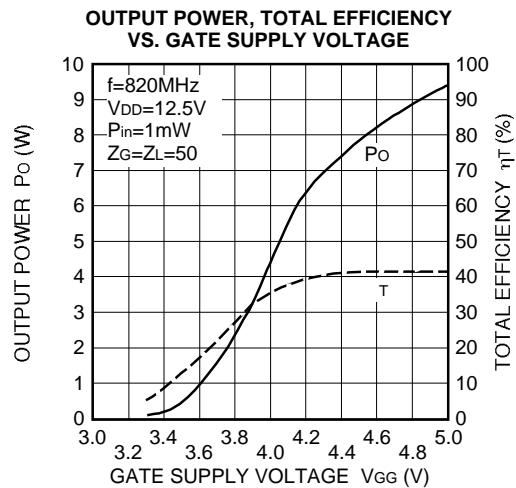
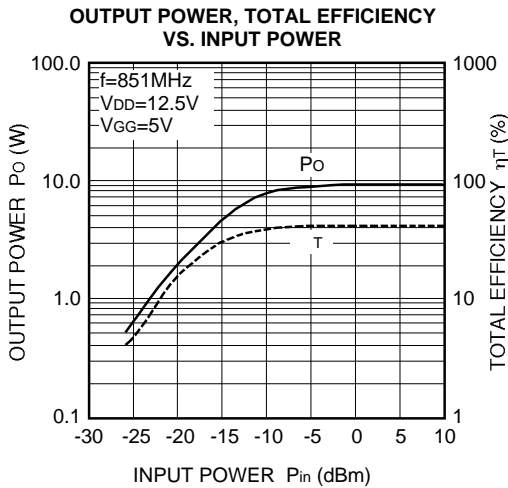
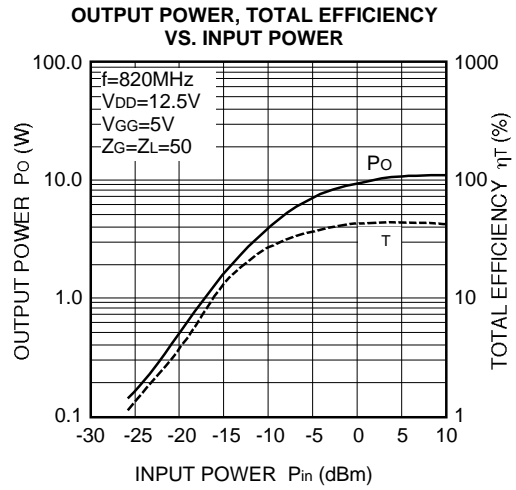
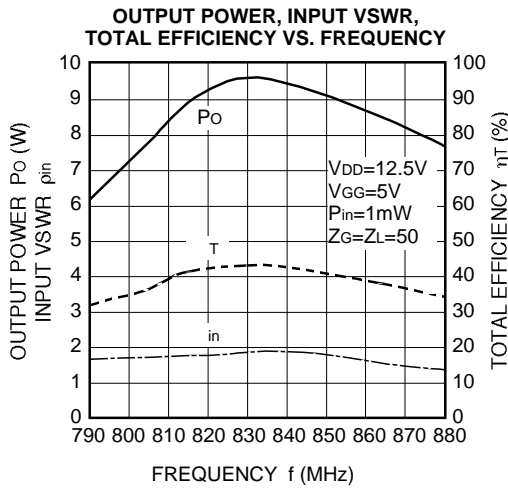
ELECTRICAL CHARACTERISTICS (T_c=25°C, Z_G=Z_L=50 unless otherwise noted)

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range		820	851	MHz
P _O	Output power	V _{DD} =12.5V, V _{GG} =5V, P _{in} =1mW	6		W
τ	Total efficiency		35		%
2f _o	2nd. harmonic			-30	
i _{in}	Input VSWR			4	-
-	Stability	Z _G =Z _L =50, V _{DD} =10-16V, Load VSWR<4:1	No parasitic oscillation		-
-	Load VSWR tolerance	V _{DD} =15.2V, P _{in} =1mW, P _O =6W (V _{GG} adjust), Z _L =20:1	No degradation or destroy		-

Note. Above parameters, ratings, limits and test conditions are subject to change.

SILICON MOS FET POWER AMPLIFIER, 820-851MHz, 6W, FM PORTABLE RADIO

TYPICAL PERFORMANCE DATA



SILICON MOS FET POWER AMPLIFIER, 820-851MHz, 6W, FM PORTABLE RADIO

