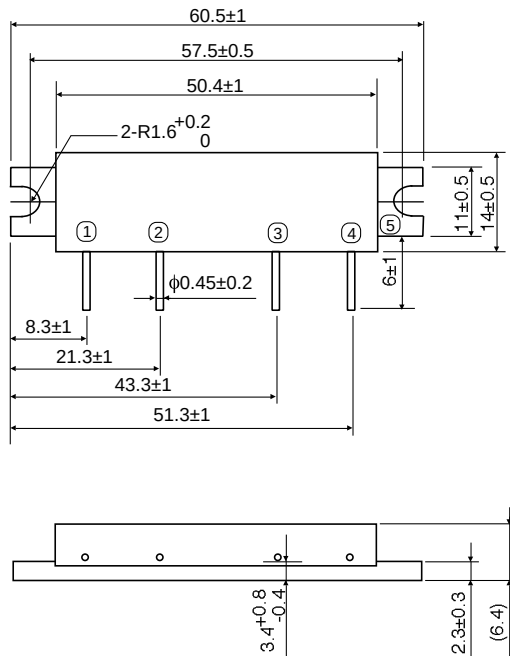


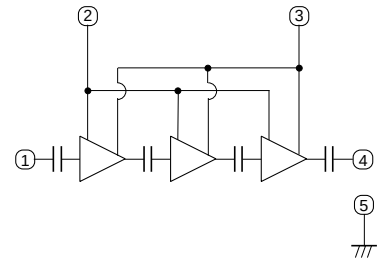
SILICON MOS FET POWER AMPLIFIER, 820-851MHz, 6W, FM PORTABLE RADIO

OUTLINE DRAWING

Dimensions in mm



BLOCK DIAGRAM



PIN:

①Pin : RF INPUT

②V_{GG} : GATE BIAS SUPPLY

③V_{DD} : DRAIN BIAS SUPPLY

④P_O : RF OUTPUT

⑤GND: 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 =50W	17	V
V _{GG}	Gate bias voltage		5.5	V
P _{in}	Input power	f=820-851MHz, Z _G =Z _L =50W	10	mW
P _O	Output power	f=820-851MHz, Z _G =Z _L =50W	10	W
T _{C (OP)}	Operation case temperature	f=820-851MHz, Z _G =Z _L =50W	-30 to +100	°C
T _{stg}	Storage temperature		-40 to +100	°C

Note. Above parameters are guaranteed independently.

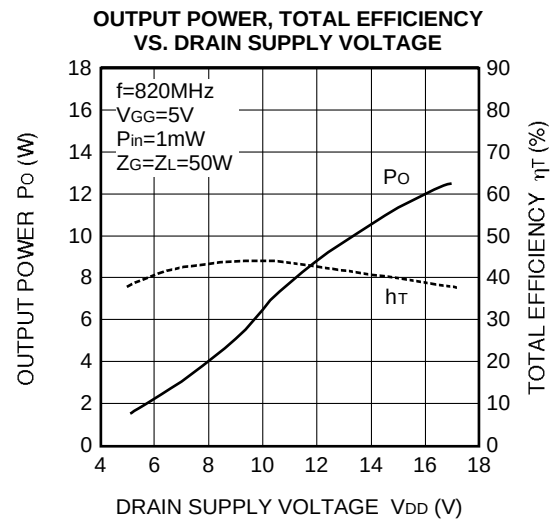
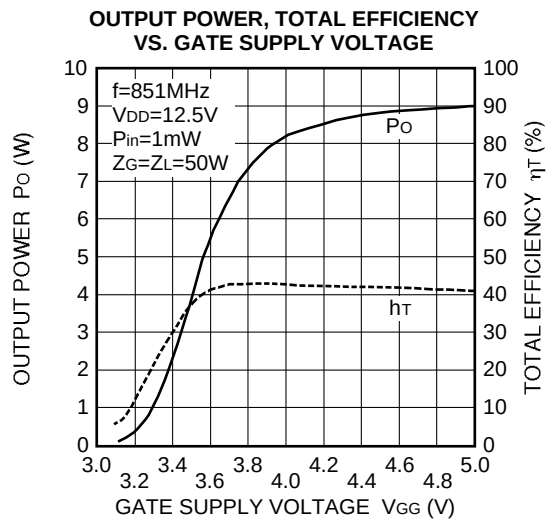
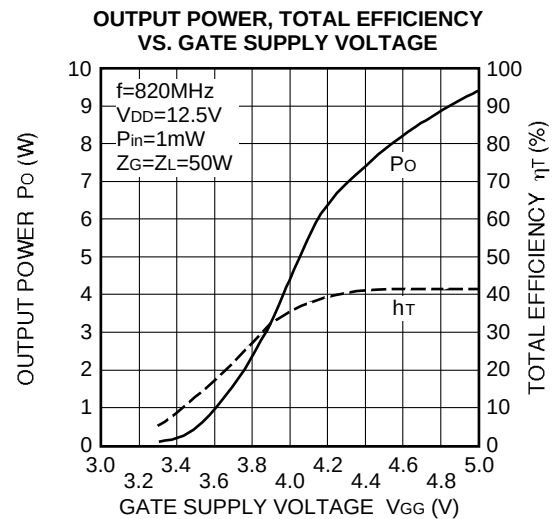
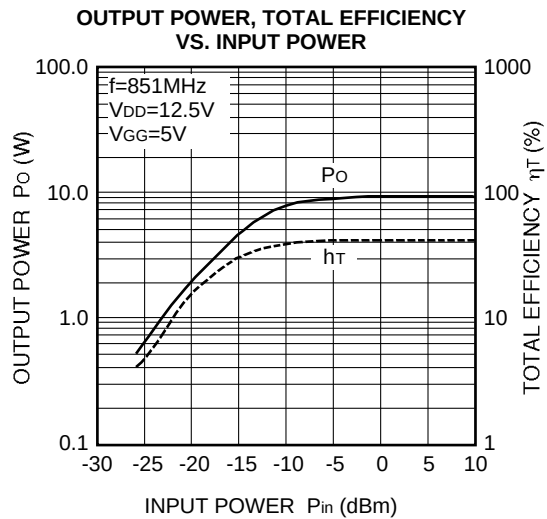
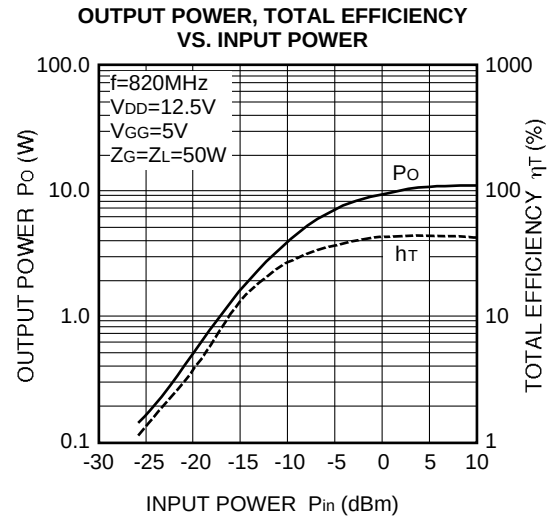
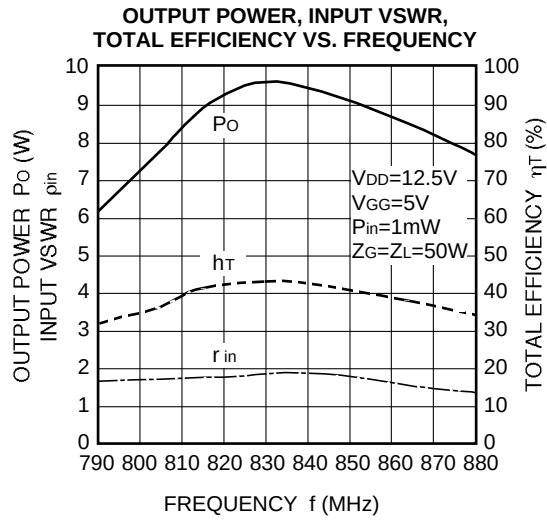
ELECTRICAL CHARACTERISTICS (T_C=25°C, Z_G=Z_L=50W unless otherwise noted)

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
h _T	Total efficiency		35		%
2f _o	2nd. harmonic			-30	dBc
r _{in}	Input VSWR			4	-
-	Stability	Z _G =Z _L =50W, 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.

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TYPICAL PERFORMANCE DATA



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

