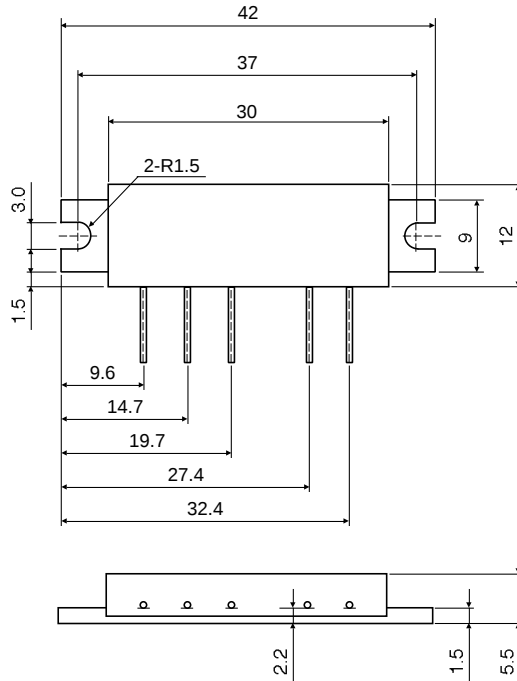


SILICON MOS FET POWER AMPLIFIER, 820-851MHz, 6W, FM MOBILE RADIO

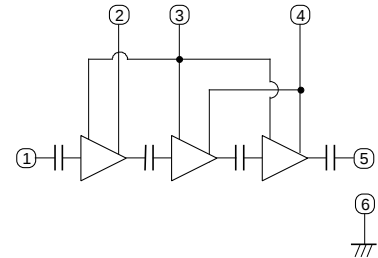
OUTLINE DRAWING

Dimensions in mm



H15

BLOCK DIAGRAM



PIN:

- ①Pin : RF INPUT
- ②VDD1: 1st DRAIN BIAS SUPPLY
- ③VGG : GATE BIAS SUPPLY
- ④VDD2: 2nd DRAIN BIAS SUPPLY
- ⑤Po : RF OUTPUT
- ⑥GND: FIN

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

Symbol	Parameter	Conditions	Ratings	Unit
VDD	Supply voltage	ZG=ZL=50Ω	17	V
VGG	Gate bias voltage		4	V
P _{in}	Input power	f=820-851MHz, ZG=ZL=50Ω	10	mW
P _o	Output power	f=820-851MHz, ZG=ZL=50Ω	10	W
T _{C (OP)}	Operation case temperature	f=820-851MHz, ZG=ZL=50Ω	-30 to +100	°C
T _{stg}	Storage temperature		-40 to +100	°C

Note. Above parameters are guaranteed independently.

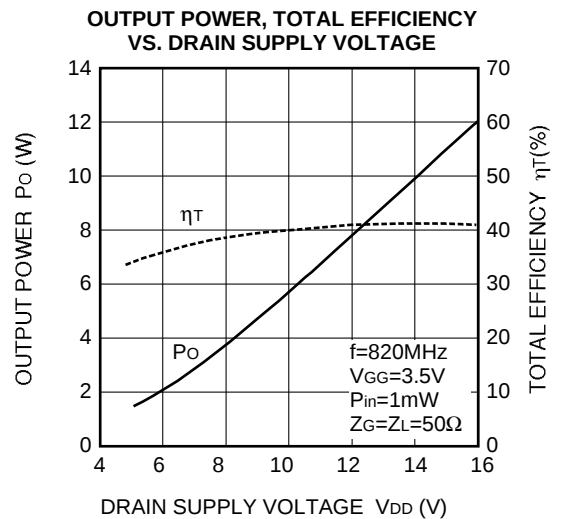
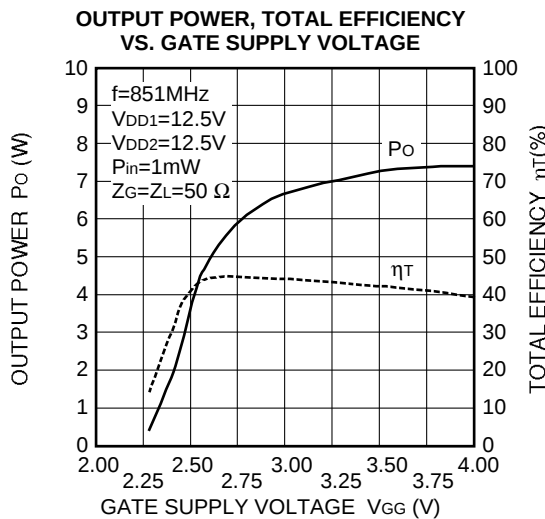
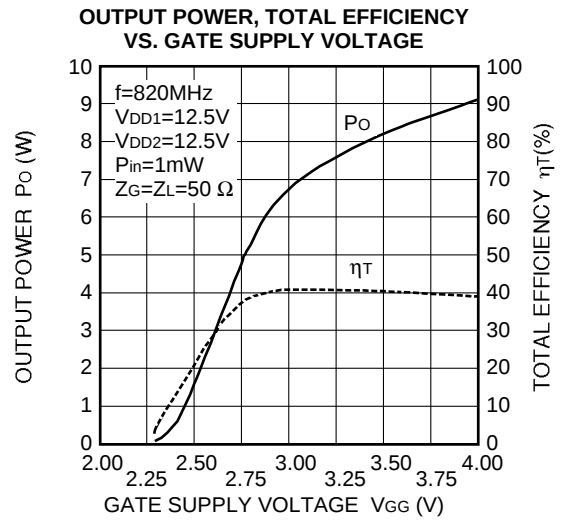
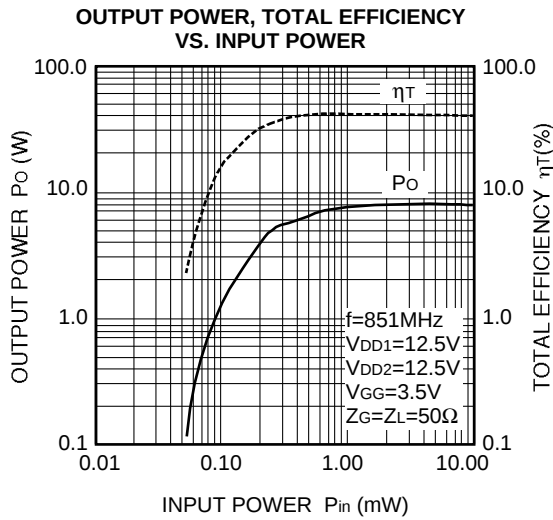
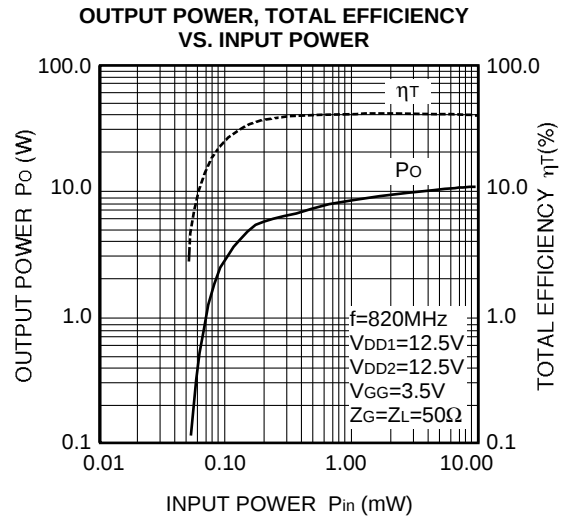
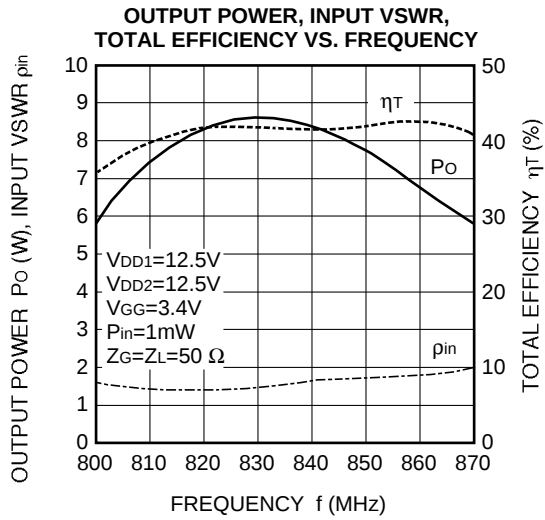
ELECTRICAL CHARACTERISTICS (Tc=25°C, ZG=ZL=50Ω unless otherwise noted)

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range		820	851	MHz
P _o	Output power	VDD=12.5V, VGG=3.5V, P _{in} =1mW, ZG=ZL=50Ω	6		W
2f _o	2nd. harmonic	P _o =6W(VGG=Adjust), VDD=12.5V, P _{in} =1mW(CW), ZG=ZL=50Ω		-30	dBc
ρ _{in}	Input VSWR			4	—
η _T	Total efficiency		33		%
—	Stability	ZG=ZL=50Ω, VDD=10-16V, Load VSWR <4:1	No parasitic oscillation		—
—	Load VSWR tolerance	VDD=15.2V, P _{in} =1mW, P _o =6W (VGG Adjust), ZL=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 MOBILE RADIO

TYPICAL PERFORMANCE DATA



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

