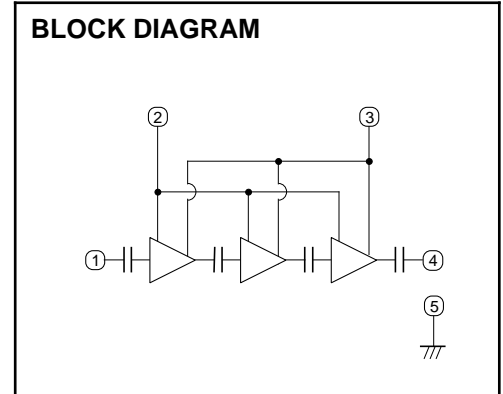
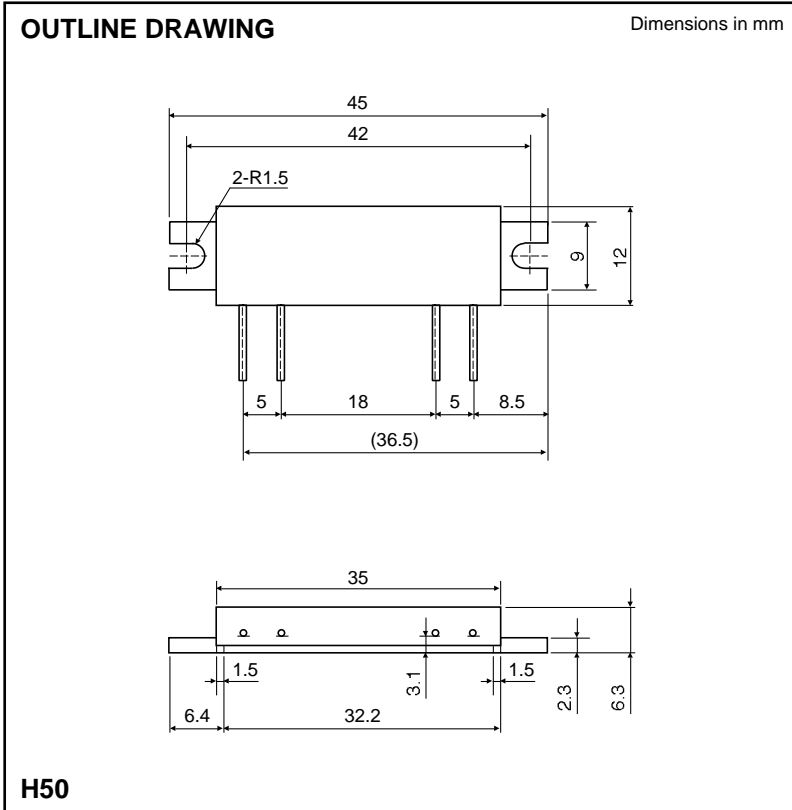


MITSUBISHI RF POWER MODULE
M68745H

SILICON MOS FET POWER AMPLIFIER, 896-941MHz, 3.8W, FM PORTABLE RADIO



PIN:
 ① Pin : RF INPUT
 ② VGG : GATE BIAS SUPPLY
 ③ VDD : DRAIN BIAS SUPPLY
 ④ PO : RF OUTPUT
 ⑤ GND: FIN

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

Symbol	Parameter	Conditions	Ratings	Unit
V _{DD}	Supply voltage	Z _G =Z _L =50	9	V
V _{GG}	Gate bias voltage		5.5	V
P _{in}	Input power	f=896-941MHz, Z _G =Z _L =50	6	mW
P _o	Output power	f=896-941MHz, Z _G =Z _L =50	6	W
T _{c(OP)}	Operation case temperature	f=896-941MHz, Z _G =Z _L =50	-30 to +100	°C
T _{stg}	Storage temperature		-40 to +100	°C

Note. Above parameters are guaranteed independently.

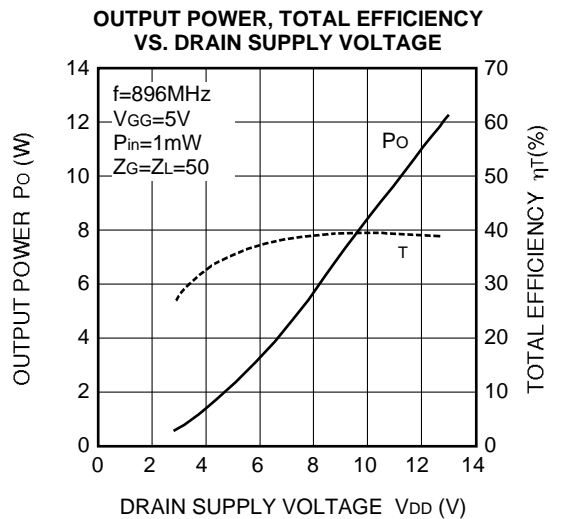
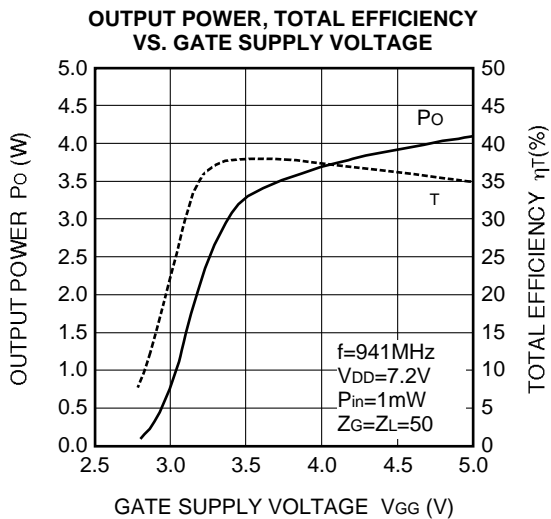
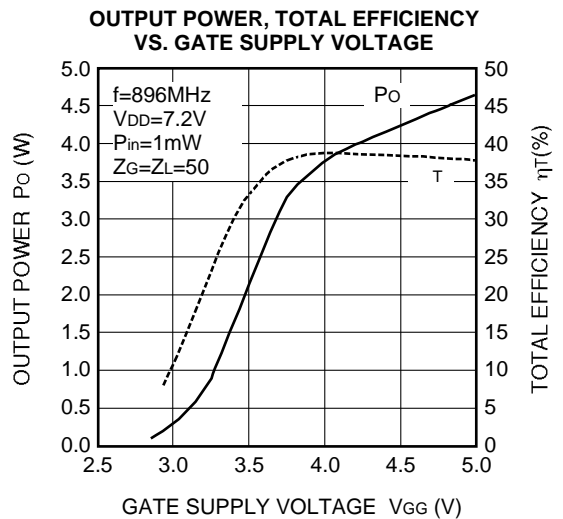
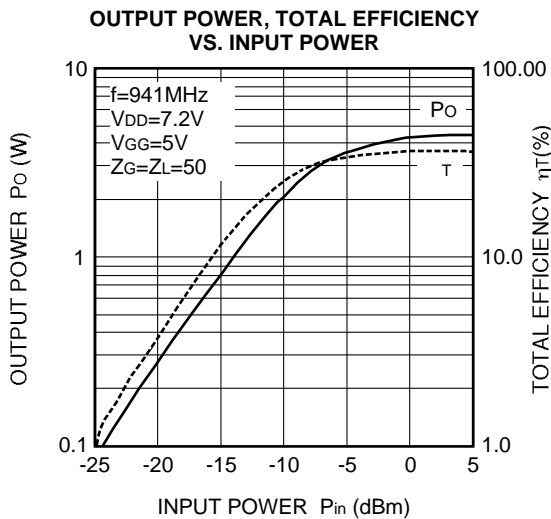
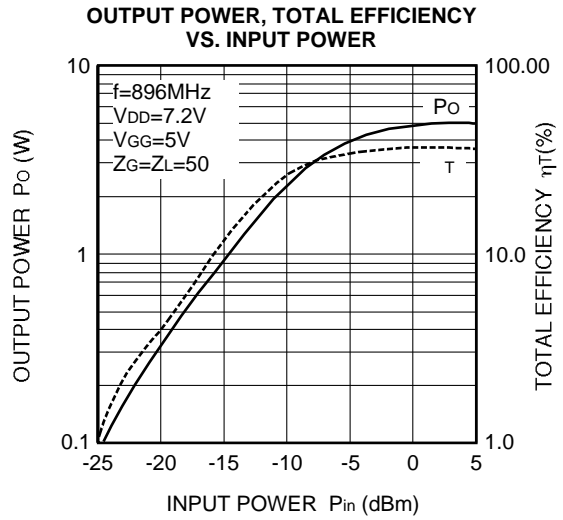
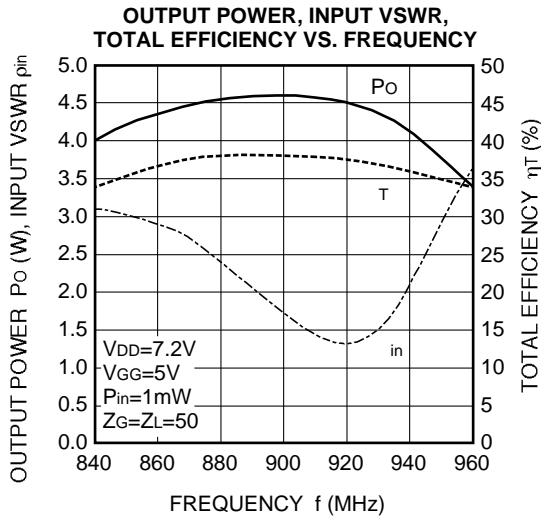
ELECTRICAL CHARACTERISTICS (Tc=25°C, Z_G=Z_L=50 unless otherwise noted)

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range		896	941	MHz
P _o	Output power	V _{DD} =7.2V, V _{GG} =5V, P _{in} =1mW, Z _G =Z _L =50	3.8		W
2f _o	2nd. harmonic			-30	dBc
in	Input VSWR			4	—
τ	Total efficiency	P _o =3.8W(V _{GG} =Adjust), V _{DD} =7.2V, P _{in} =1mW, Z _G =Z _L =50	30		%
—	Stability	Z _G =Z _L =50, V _{DD} =5-9.3V, Load VSWR <4:1	No parasitic oscillation		—
—	Load VSWR tolerance	V _{DD} =9V, P _{in} =1mW, P _o =3.8W (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, 896-941MHz, 3.8W, FM PORTABLE RADIO

TYPICAL PERFORMANCE DATA



SILICON MOS FET POWER AMPLIFIER, 896-941MHz, 3.8W, FM PORTABLE RADIO

