

RF Power Module

M57786M

430-470MHz

7,2V / 7W

DATASHEET

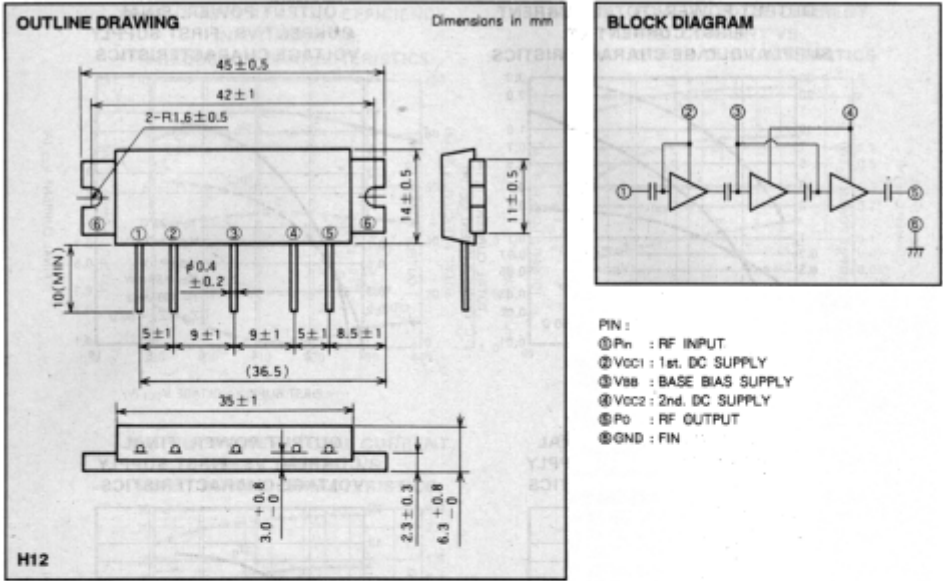
OEM –Mitsubishi

Source: Mitsubishi Databook 1995

MITSUBISHI RF POWER MODULE

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430-470MHz, 7.2V, 7W, FM PORTABLE RADIO



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

Symbol	Parameter	Conditions	Ratings	Unit
V _{cc}	Supply voltage	V _{bb} ≤ 5V	10	V
V _{bb}	Base bias	V _{cc} ≤ 7.2V	6	V
I _{cc}	Total current		4	A
P _{in(max)}	Input power	Z ₀ = Z _L = 50 Ω	100	mW
P _{o(max)}	Output power	Z ₀ = Z _L = 50 Ω	10	W
T _{c(OP)}	Operation case temperature		- 30 to 110	°C
T _{stg}	Storage temperature		- 40 to 110	°C

Note. Above parameters are guaranteed independently.

ELECTRICAL CHARACTERISTICS (T_c = 25 °C unless otherwise noted)

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range	P _{in} = 50mW V _{bb} = 5V V _{cc} = 7.2V Z ₀ = Z _L = 50 Ω	430	470	MHz
P _o	Output power		7		W
η _T	Total efficiency		40		%
2f ₀	2nd. harmonic			- 25	dBc
3f ₀	3rd. harmonic			- 30	dBc
ρ _{in}	Input VSWR			2.5	-
-	Load VSWR tolerance	V _{cc} = 7.2V, V _{bb} = 5V P _o = 7W (P _{in} : controlled) Load VSWR=20:1 (All phase), 2sec. Z ₀ = 50 Ω	No degradation or destroy		-

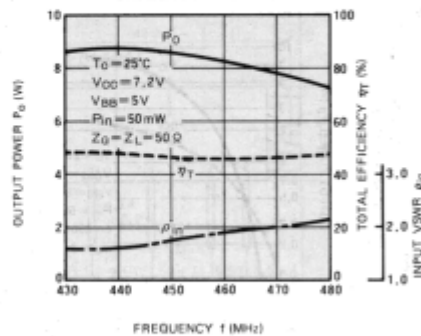
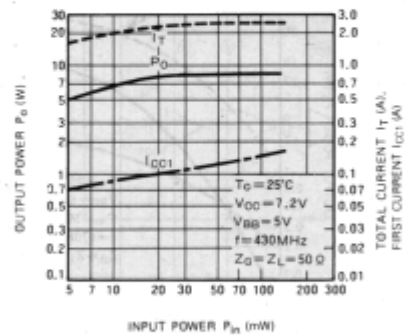
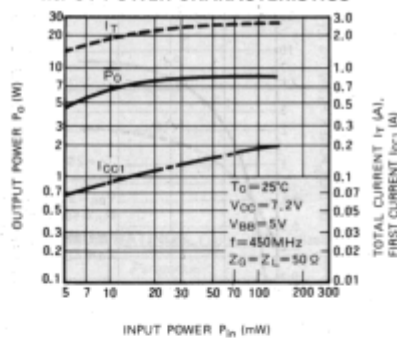
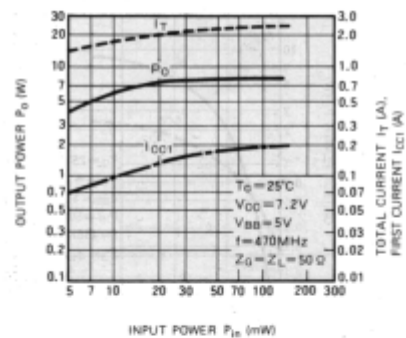
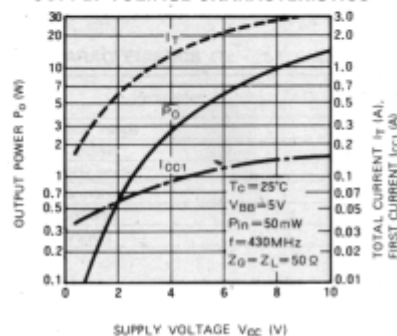
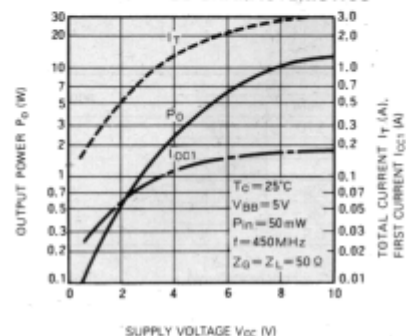
Note. Above parameters, ratings, limits and conditions are subject to change.

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TYPICAL PERFORMANCE DATA

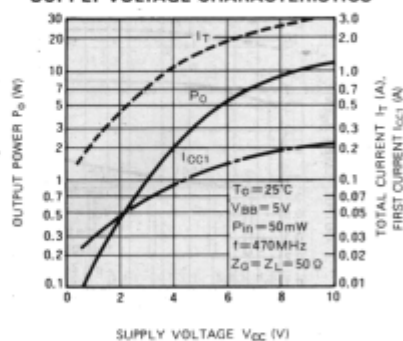
OUTPUT POWER, TOTAL EFFICIENCY,
INPUT VSWR VS. FREQUENCY
CHARACTERISTICSOUTPUT POWER, TOTAL CURRENT,
FIRST CURRENT VS.
INPUT POWER CHARACTERISTICSOUTPUT POWER, TOTAL CURRENT,
FIRST CURRENT VS.
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FIRST CURRENT VS.
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FIRST CURRENT VS.
SUPPLY VOLTAGE CHARACTERISTICSOUTPUT POWER, TOTAL CURRENT,
FIRST CURRENT VS.
SUPPLY VOLTAGE CHARACTERISTICS

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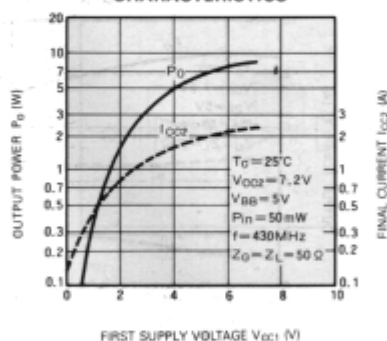
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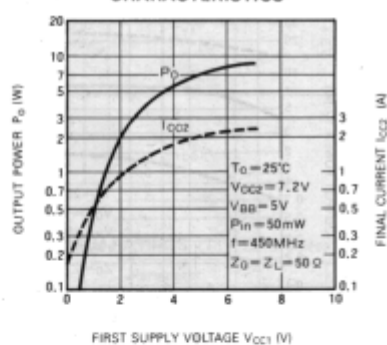
OUTPUT POWER, TOTAL CURRENT,
FIRST CURRENT VS.
SUPPLY VOLTAGE CHARACTERISTICS



OUTPUT POWER, FINAL CURRENT
VS. FIRST SUPPLY VOLTAGE
CHARACTERISTICS



OUTPUT POWER, FINAL CURRENT
VS. FIRST SUPPLY VOLTAGE
CHARACTERISTICS



OUTPUT POWER, FINAL CURRENT
VS. FIRST SUPPLY VOLTAGE
CHARACTERISTICS

