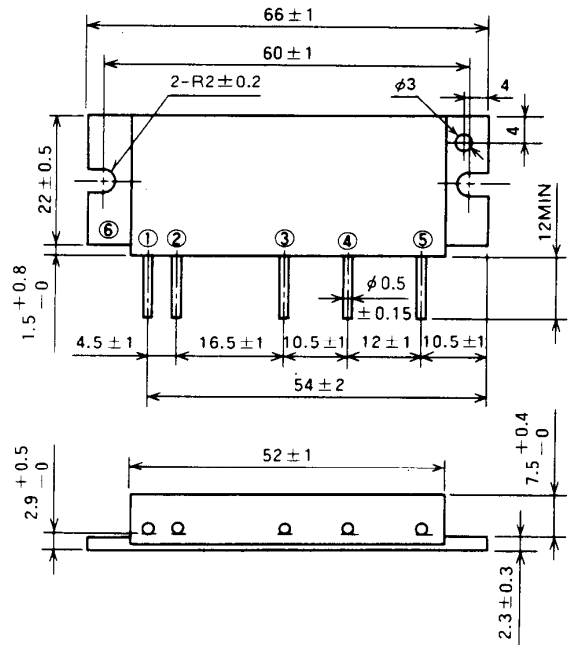
M57704H

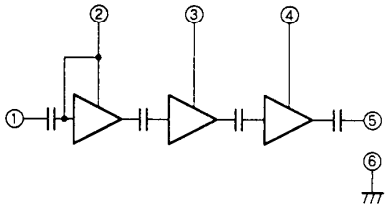
450-470MHz, 12.5V, 13W, FM MOBILE RADIO

OUTLINE DRAWING Dimensions in mm



H3

BLOCK DIAGRAM



PIN :
①Pin : RF INPUT
②Vcc1 : 1st. DC SUPPLY
③Vcc2 : 2nd. DC SUPPLY
④Vcc3 : 3rd. DC SUPPLY
⑤Po : RF OUTPUT
⑥GND : FIN

ABSOLUTE MAXIMUM RATINGS (Tc = 25℃ unless otherwise noted)

Symbol	Parameter	Conditions	Ratings	Unit
Vcc	Supply voltage		17	V
Icc	Total current		5	A
Pin(max)	Input power	ZG = ZL = 50 Ω	0.4	W
Po(max)	Output power	ZG = ZL = 50 Ω	20	W
Tc(OP)	Operation case temperature		− 30 to 110	℃
Tstg	Storage temperature		− 40 to 110	℃

Note. Above parameters are guaranteed independently.

ELECTRICAL CHARACTERISTICS (Tc = 25℃ unless otherwise noted)

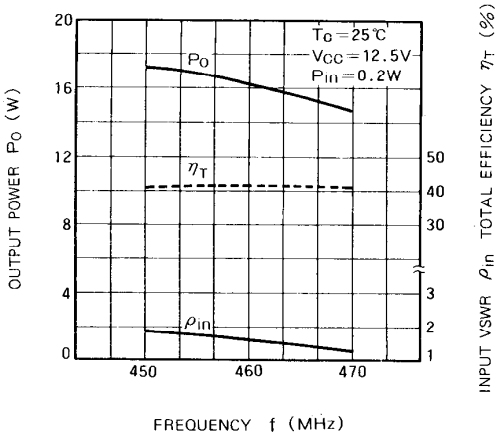
Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range	Pin = 0.2W Vcc = 12.5V ZG = ZL = 50 Ω	450	470	MHz
Po	Output power		13		W
ηT	Total efficiency		35		%
2fo	2nd. harmonic			− 30	dBc
ρin	Input VSWR			2.8	−
−	Load VSWR tolerance	Vcc = 15.2V, Po = 14W (Pin : controlled) Load VSWR=20:1(All phase), 2sec. ZG = 50 Ω	No degradation or destroy		−

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

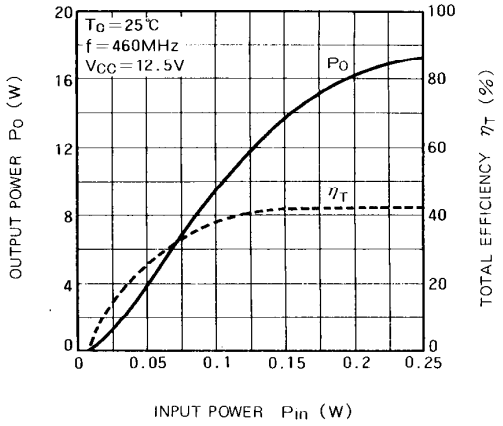
MITSUBISHI ELECTRIC

TYPICAL PERFORMANCE DATA

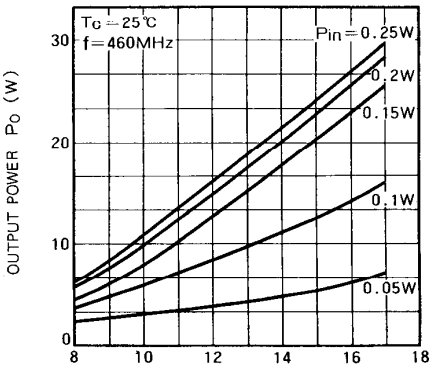
OUTPUT POWER TOTAL EFFICIENCY INPUT VSWR VS. FREQUENCY



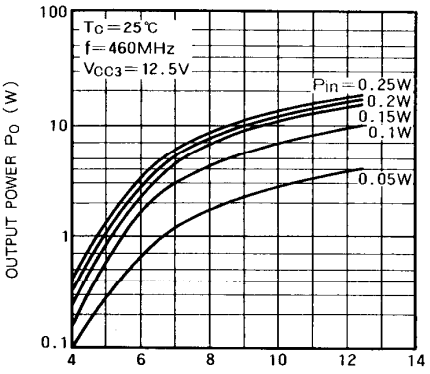
OUTPUT POWER TOTAL EFFICIENCY VS. INPUT POWER



OUTPUT POWER VS. DC SUPPLY VOLTAGE



OUTPUT POWER VS. 1st AND 2nd VOLTAGE



INPUT IMPEDANCE OUTPUT IMPEDANCE