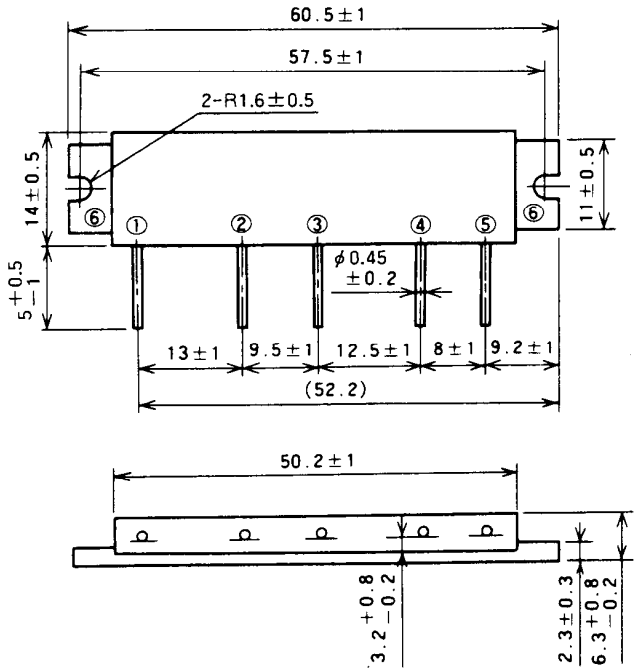
M67759

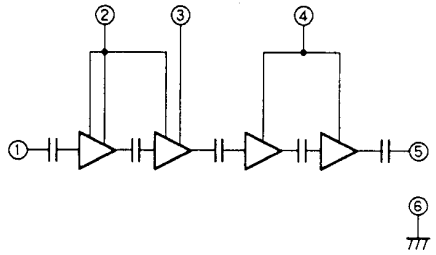
872-905MHz, 12.5V, 6W, FM MOBILE RADIO

OUTLINE DRAWING Dimensions in mm



H11

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
Vcc1, 2	Supply voltage		9	V
Vcc3			17	V
Icc	Total current		4	A
Pin(max)	Input power	f=872-905MHz, Vcc1 ≦ 8V, ZG=ZL=50Ω	10	mW
Po(max)	Output power	Ditto	10	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)

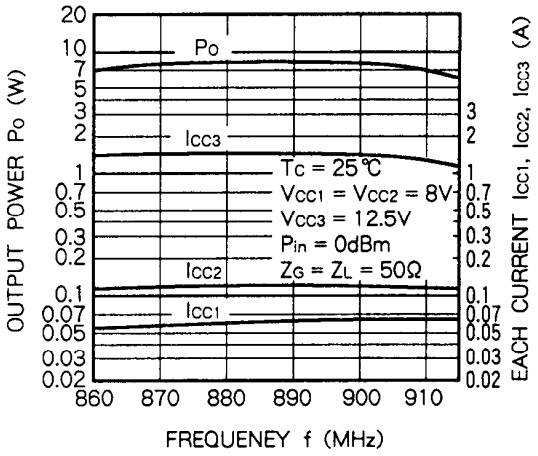
Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range	Vcc1 = Vcc2 = 8V, Vcc3 = 12.5V Pin = 1mW, ZG = ZL = 50 Ω	872	905	MHz
Po	Output power		6		W
ηT	Total efficiency	Vcc1 = 8V, Po = 6W (Vcc2 : controlled) Vcc3 = 12.5V, Pin = 1mW, ZG = ZL = 50 Ω	35		%
2fo	2nd. harmonic			− 30	dBc
ρin	Input VSWR			2.5	−
−	Load VSWR tolerance	Vcc1 = 8V, Vcc3 = 15.2V, Po = 6W (Vcc2 : controlled) Pin = 1mW Load VSWR=20:1 (All phase), 5sec.	No degradation or destroy		−

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

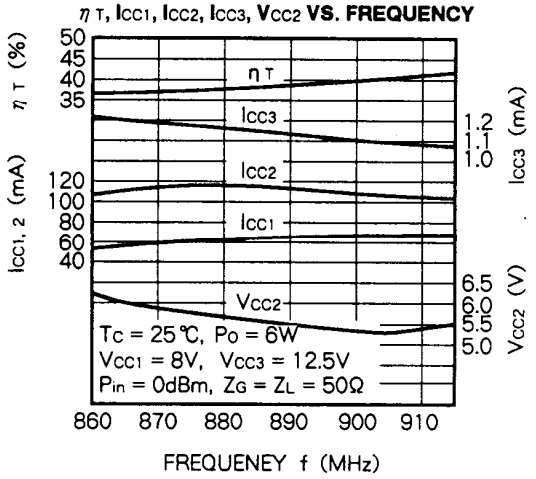
MITSUBISHI ELECTRIC

TYPICAL PERFORMANCE DATA

OUTPUT POWER, EACH CURRENT VS. FREQUENCY CHARACTERISTICS



ηT, Icc1, Icc2, Icc3, Vcc2 VS. FREQUENCY



OUTPUT POWER, EACH CURRENT VS. 2nd VOLTAGE CHARACTERISTICS