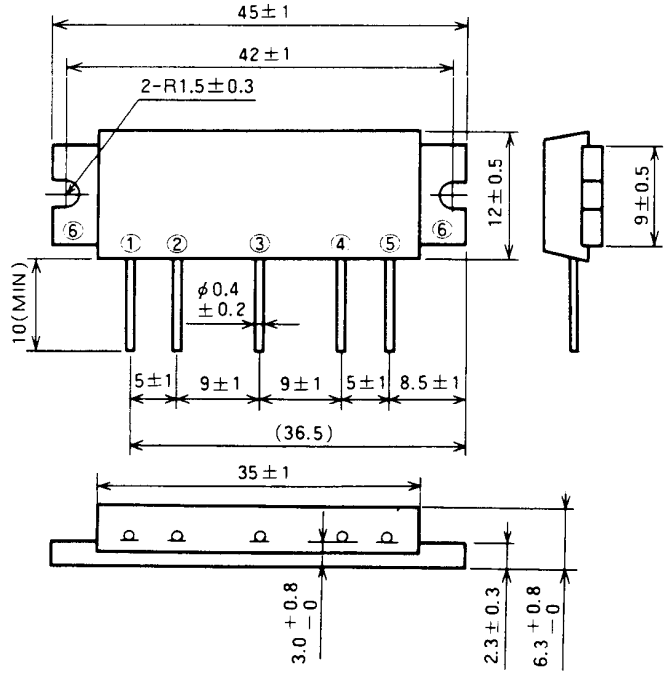
M67785H

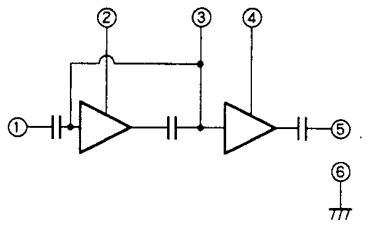
220-240MHz, 9.6V, 5W, FM PORTABLE RADIO

OUTLINE DRAWING Dimensions in mm



H13

BLOCK DIAGRAM



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

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

Symbol	Parameter	Conditions	Ratings	Unit
Vcc	Supply voltage		13	V
VBB	Base bias		5.5	V
Icc	Total current		4	A
Pin(max)	Input power	ZG = ZL = 50 Ω, Vcc1 ≦ 9.6V	30	mW
Po(max)	Output power	ZG = ZL = 50 Ω	7	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 = 20mW VBB = 5V Vcc = 9.6V ZG = ZL = 50 Ω	220	240	MHz
Po	Output power		5		W
ηT	Total efficiency		40		%
2fo	2nd. harmonic			− 20	dBc
3fo	3rd. harmonic			− 35	dBc
ρin	Input VSWR			2.5	−
−	Load VSWR tolerance	Vcc2 = 13V, VBB = 5V, Pin = 20mW Po = 5W (Vcc1 : 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