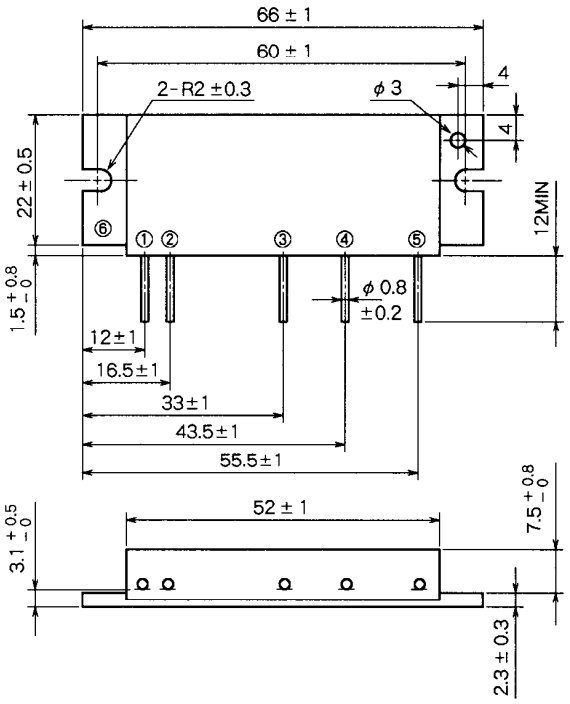
MITSUBISHI RF POWER MODULE

M57729GL

326-346MHz, 12.5V, 30W, FM MOBILE RADIO

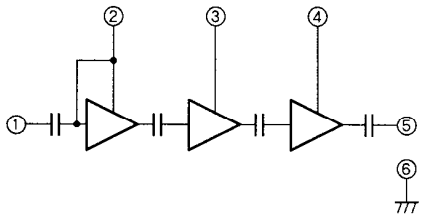
OUTLINE DRAWING

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		10	A
Pin(max)	Input power	Vcc1 ≦ 12.5V, ZG = ZL = 50 Ω	600	mW
Po(max)	Output power	Vcc1 ≦ 12.5V, ZG = ZL = 50 Ω	40	W
Tc(OP)	Operation case temperature	Vcc1 ≦ 12.5V, ZG = ZL = 50 Ω	− 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 Min	Limits Max	Unit
f	Frequency range	Vcc1 = Vcc2 = 12.5V Pin = 300mW ZG = ZL = 50 Ω	326	346	MHz
Po	Output power		30		W
ηT	Total efficiency		40		%
2fo	2nd. harmonic			− 30	dBc
3fo	3rd. harmonic			− 30	dBc
ρin	Input VSWR			3.3	−
−	Load VSWR tolerance	Vcc1 = Vcc2 = 15.2V Po = 30W (Pin : controlled) Load VSWR≧20:1 (All phase), ZG = 50Ω	No degradation or destroy		−

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