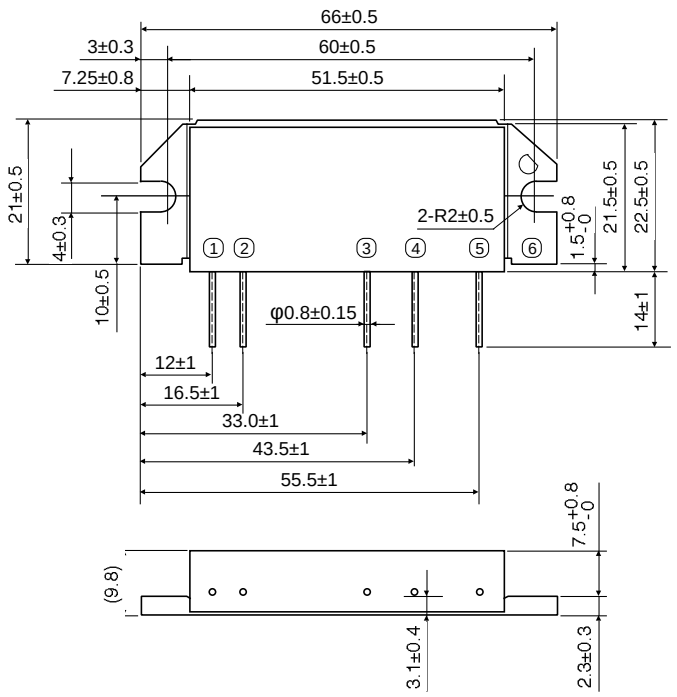
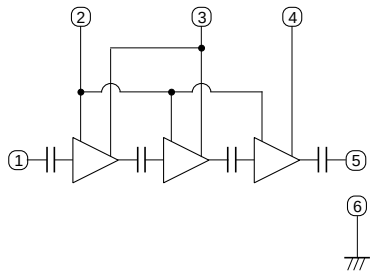
OUTLINE DRAWING

Dimensions in mm



H3

BLOCK DIAGRAM



PIN:
① Pin : RF INPUT
② VBB : BASE BIAS SUPPLY
③ VCC1: 1st. DC SUPPLY
④ VCC2: 2nd. DC SUPPLY
⑤ PO : RF OUTPUT
⑥ GND: FIN

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

Symbol	Parameter	Conditions	Ratings	Unit
VCC	Supply voltage	ZG=ZL=50Ω, VBB=9V	17	V
VBB	Bias voltage	ZG=ZL=50Ω, VCC≤12.5V	9.5	V
ICC	Total current	ZG=ZL=50Ω	10	A
Pin (max)	Input power	ZG=ZL=50Ω, VCC1≤12.5V	500	mW
PO (max)	Output power	ZG=ZL=50Ω	40	W
Tc (OP)	Operation case temperature	ZG=ZL=50Ω	-30 to +110	°C
Tstg	Storage temperature		-40 to +110	°C

Note. Above parameters are guaranteed independently.

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

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range		380	400	MHz
PO	Output power	Pin=300mW, VCC=12.5V, VBB=9V, ZG=ZL=50Ω	30		W
ηT	Total efficiency		40		%
2fO	2nd. harmonic			-30	dBc
3fO	3rd. harmonic			-30	dBc
ρin	Input VSWR			2.8	-
Gp	Power gain	Pin=10dBm, VCC=12.5V, VBB=9V, ZG=ZL=50Ω	24		dB
IMD3	3rd. internal modulation	VCC=12.5V, VBB=9V, PO (AVE)=20W, (Pin:controlled) 2tone, Δf=10kHz, ZG=ZL=50Ω		-20	dBc
IMD5	5th. internal modulation			-28	dBc
-	Load VSWR tolerance	VCC=15.2V, VBB=9V, PO=20W(Pin:controlled), ZG=50Ω, Load VSWR=8:1 (All phase)	No degradation or destroy		-
-	Stability	Pin=0-400mW, VCC=10-16V, VBB=9V, PO≤35W ρI≤3.0 (All phase), ZG=50Ω	No parastic oscillation		Note 1

Note. Above parameters, ratings, limits and test conditions are subject to change.
Note 1. Stability is tested by sampling test (10pcs/Lot)