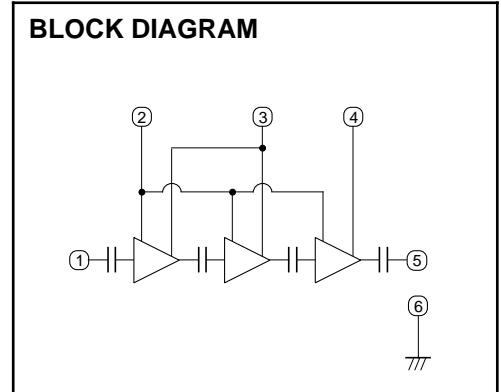
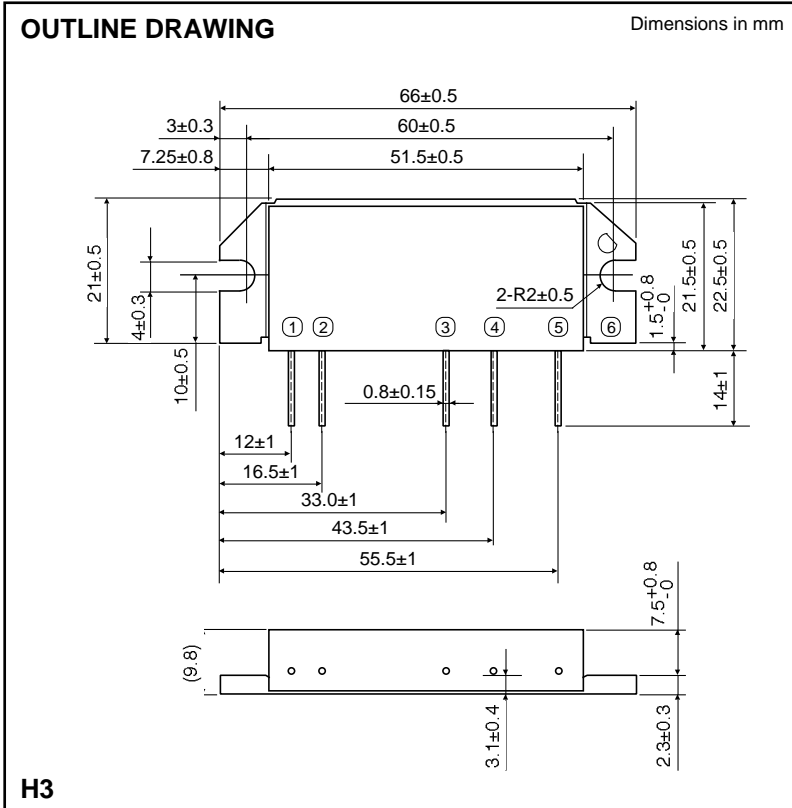


MITSUBISHI RF POWER MODULE  
**M57745B**

380-400MHz, 12.5V, 10W, DIGITAL MOBILE RADIO



- 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=50 , VBB=9V	17	V
VBB	Bias voltage	ZG=ZL=50 , Vcc 12.5V	9.5	V
Icc	Total current	ZG=ZL=50	10	A
Pin (max)	Input power	ZG=ZL=50 , Vcc1 12.5V	500	mW
PO (max)	Output power	ZG=ZL=50	40	W
Tc (OP)	Operation case temperature	ZG=ZL=50	-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		30		W
T	Total efficiency		40		%
2fo	2nd. harmonic	Pin=300mW, Vcc=12.5V, VBB=9V, ZG=ZL=50		-30	dBc
3fo	3rd. harmonic			-30	dBc
in	Input VSWR			2.8	-
Gp	Power gain	Pin=10dBm, Vcc=12.5V, VBB=9V, ZG=ZL=50	24		dB
IMD3	3rd. internal modulation	Vcc=12.5V, VBB=9V, PO (AVE)=20W, (Pin:controlled) 2tone, f=10kHz, ZG=ZL=50		-20	dBc
IMD5	5th. internal modulation			-28	dBc
-	Load VSWR tolerance	Vcc=15.2V, VBB=9V, PO=20W(Pin:controlled), ZG=50 , Load VSWR=8:1 (All phase)	No degradation or destroy		-
-	Stability	Pin=0-400mW, Vcc=10-16V, VBB=9V, PO 35W   3.0 (All phase), ZG=50	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)