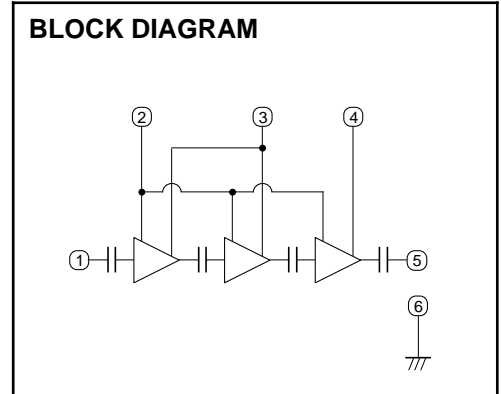
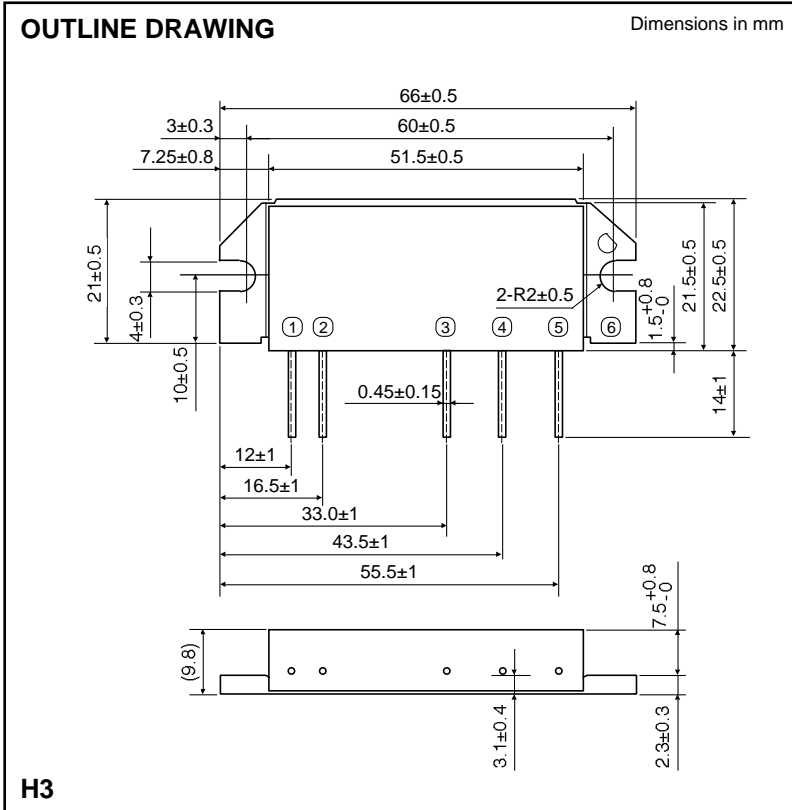


MITSUBISHI RF POWER MODULE
M57716L

360-380MHz, 12.5V, 13W, 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 (T_c=25°C unless otherwise noted)

Symbol	Parameter	Conditions	Ratings	Unit
V _{CC}	Supply voltage	Z _G =Z _L =50 , V _{BB} =9V	17	V
V _{BB}	Bias voltage	Z _G =Z _L =50 , V _{CC} 12.5V	9.5	V
I _{CC}	Total current	Z _G =Z _L =50	6	A
P _{in (max)}	Input power	Z _G =Z _L =50 , V _{CC} 12.5V, V _{BB} =9V	300	mW
P _{O (max)}	Output power	Z _G =Z _L =50 , V _{CC} 12.5V, V _{BB} =9V	20	W
T _{C (OP)}	Operation case temperature	Z _G =Z _L =50	-30 to +110	°C
T _{stg}	Storage temperature		-40 to +110	°C

Note. Above parameters are guaranteed independently.

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

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range		360	380	MHz
P _O	Output power	P _{in} =200mW, V _{CC} =12.5V, V _{BB} =9V, Z _G =Z _L =50	13		W
η	Total efficiency	V _{CC} =12.5V, V _{BB} =9V, P _O =4W (P _{in} :controlled) Z _G =Z _L =50	15		%
2f _o	2nd. harmonic	P _{in} =200mW, V _{CC} =12.5, V _{BB} =9V, Z _G =Z _L =50		-30	dBc
3f _o	3rd. harmonic			-30	dBc
S _{in}	Input VSWR			2.5	-
G _p	Power gain	P _{in} =10dBm, V _{CC} =12.5V, V _{BB} =9V, Z _G =Z _L =50	27		dB
IMD3	3rd. internal modulation	V _{CC} =12.5V, V _{BB} =9V, P _O (AVE)=4W, (P _{in} :controlled) 2tone, f=2kHz, Z _G =Z _L =50		-25	dBc
-	Load VSWR tolerance	V _{CC} =14.4V, V _{BB} =9V, P _O =10W (P _{in} :controlled) Z _G =50 , Load VSWR=8:1 (All phase)	No degradation or destory		-
-	Stability	P _{in} =0-300mW, V _{CC} =10.8-13.2V, V _{BB} =9V, P _O 20W 3.0 (All phase), Z _G =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)

TYPICAL PERFORMANCE DATA

