



MA1065-1

For 1.9 GHz - High Power Amplifier

MA1065

DESCRIPTION

The MA1065-1 are 1.9 GHz band power amplifier modules (Po = +4.0W), constructed by driver-amp, highpower-amp, power-monitor and control-circuit. Input and Output impedances are designed to 50Ω.

FEATURES

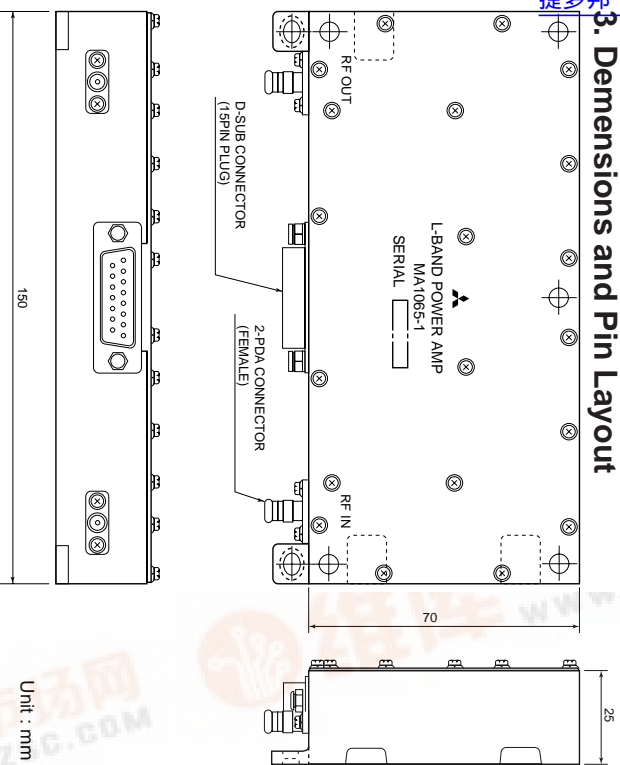
MA1065-1 : Po = +22.4 ~ 36.4 dBm (8 step, Pin = -9.0 dBm) @1.9 GHz
 Vs = +12.0V, Vg = -7.0V,
 Vcont = +5.0V

APPLICATION

Power amplifier module for PHS base station/Japan.

OUTLINE DRAWING

3. Dimensions and Pin Layout



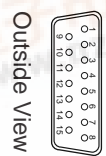
2-2 D-sub Connector pin assign

1	Vs	+12V Power Supply
2	Vs	+12V Power Supply
3	GND	Analog GND
4	Vg	-10V Power Supply
5	GND	Analog GND
6	GND	Digital GND
7	N/C	N/C
8	N/C	N/C
9	Vs	+12V Power Supply
10	GND	Analog GND
11	GND	Analog GND
12	GND	Analog GND for Vp
13	Vp	RF monitor for ALC
14	N/C	N/C
15	TXE	Transmission ON/OFF Control (PA Control)

2-1 Noise from Primary Power Supply
 +12V: 200 mVp-pmax
 -10V: 100mVp-pmax

2-3 PA Control

PA	TXE
OFF	0
ON	1



1. Maximum Ratings (MA1065-1)

No.	Items	Symbol	Standard	Condition
1	Voltage	Vs	+16 V	Ta = +25°C
		Vg	-12.5V	Ta = +25°C
2	Input RF Power	Pin	+5 dBm	Ta = +25°C, f = 1895 ~ 1918 MHz
3	Operating Temperature	Top	-20 ~ +80°C	Base Plate Temperature
4	Storage Temperature	Tsig	-40 ~ +90°C	
5	Humidity	Rh	+50°C, 95% R.H	

2. Electrical Performances

No.	Items	Condition	Standard			Unit
			Min	Typ	Max	
1	Frequency	f = 1895, 1906, 1918 MHz Pin = -9.0 dBm	1895	---	1918	MHz
	Output Power		35.9	36.4	36.9	dBm
2	Ripple	f = 1895, 1906, 1918 MHz Pin = -9.0 dBm	---	---	0.6	dBp-p
	Temperature drift		---	---	±2.0	dB
3	ACP	f = 1895, 1906, 1918 MHz Pout = 36.4 dBm π / 4 Shift QPSK Modulation	---	---	---	dBc
	600 KHz deviation		---	---	-69.0	dBc
4	900 KHz deviation	f = 1895, 1906, 1918 MHz Pin ≤ -9.0 dBm	---	---	-74.0	dBc
	Input/Output VSWR		---	---	1 : 1.5	
5	Load VSWR	f = 1895, 1906, 1918 MHz Pin ≤ -9.0 dBm	---	---	---	
	Spurious		---	---	---	
6	In-band	f = 1895 ~ 1918 MHz Pout = 36.4 dBm	---	---	-75.0	dBc
	Out of band		---	---	-65.0	dBc
7	Drain Current +12V	f = 1906 MHz π / 4 Shift QPSK Modulation Pout = 36.4 dBm	---	---	3.3 A max 200 mA	
	(1) Transmission		---	---		
8	(2) Non Transmission	Pin = -75 dBm	---	---	-70.0	dBm/200kHz
	Carrier-off leak power		---	---		
9	Burst Transmission Response	Pout = 39.4 dBm f = 1895, 1906, 1918 MHz Without modulation	---	---	2.6	μS
	Burst Power Monitor		---	---		
9	Output Voltage	f = 1895, 1906, 1918 MHz Without modulation	---	---	3.0	V
	Slope		---	400	---	mV/dB
9	Frequency and Temperature drift	Output Voltage under Burst off time	---	---	1.0	dBp-p
	Output Voltage under Burst off time		---	---	0.5	V

查询MA1065-1供应商

捷多邦, 专业PCB打样工厂, 24小时加急出货

