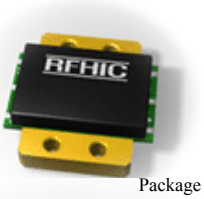
Power Amplifier RFM1842-10

Product Features

- Small size by using simple matching circuit board
- High Efficiency
- Single Supply Voltage
- High Linearity, 10W Power
- Heat sink 99.9% copper, gold plate
- High Productivity
- Low Manufacturing Cost
- GaAs MESFET

Application

- DCS Repeater
- RF Sub-Systems
- Base Station



Package : DP-36



Description

The power amplifier module is designed for base stations and cell extenders as cellular and GSM , IMT-2000, ISM, MMDS frequency systems.
GaAs MESFET is used and attached on a copper sub carrier. It is connected by using bias and in/out matching circuit method with gold wire bonding.
The bias and matching circuit are designed much simpler than other circuits for silicon IC's, LDMOS because GaAs MESFET is operated by low supply voltage whereas others are operated by high supply voltage.
For better thermal conductivity, enhanced mode PCB was used in the 99.9% copper gold plate heat sink.
This simplicity results cost competitiveness and performance enhancement.

Specifications

PARAMETER	Min	Typ	Max
Frequency Range (MHz)	1805 ~ 1880		
Small Signal Gain (dB)	12.5		
Gain Flatness (Max.)	± 0.5dB @ 50MHz BW		
Gain Variation Over Temp		± 0.5dB	± 1.0dB
VSWR (Input)	2 : 1		
Output P1dB	37 dBm	38 dBm	
CDMA Power (1 FA)	32 dBm		
Vcc / Idc (CDMA Only)	9V / 1.2A		
OIP3 @ tone / 27 dBm	49 dBm	50 dBm	
Noise Figure (Typ.)	5 dB		
Shut Down (On/Off)	+5V @ 25㎂ / 0V		
In/Out Connectors	SMA Female (50 Ω)		
Operating Temp Range	-20°C ~ +70°C		
Dimensions (W×L×H)	29.0 × 30.2 × 9.0 [mm] (RFM) 48.0 × 54.2 × 22.0 [mm] (RFH)		

NOTE

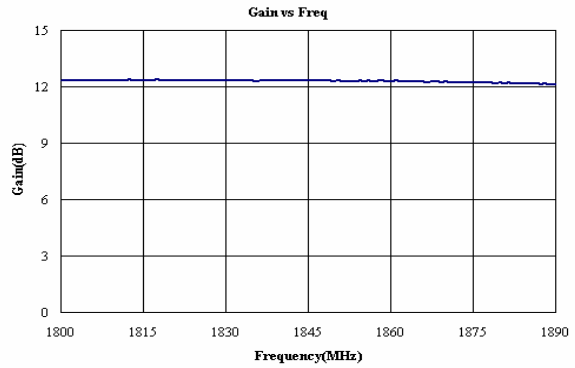
* CDMA : 1.25MHz symbol rate ; Forward Link ; 9 Channels, Multi tone Available
  @ ±885KHz offset in 30KHz resolution bandwidth
  @ ±1.98MHz offset in 30KHz resolution bandwidth
* RFM : Internally Matched Module
* RFH : Housing Type
  : RF Connector
  : SMA Female

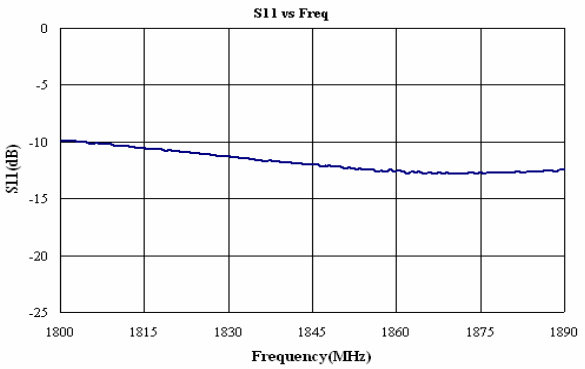
▪ Tel : 82-31-250-5011
▪ rfsales@rfhic.com

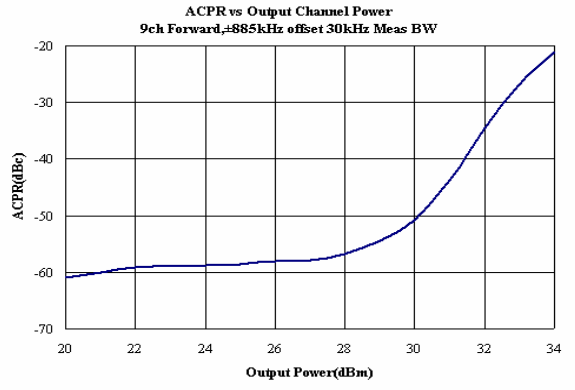
▪ All specifications may change without notice.

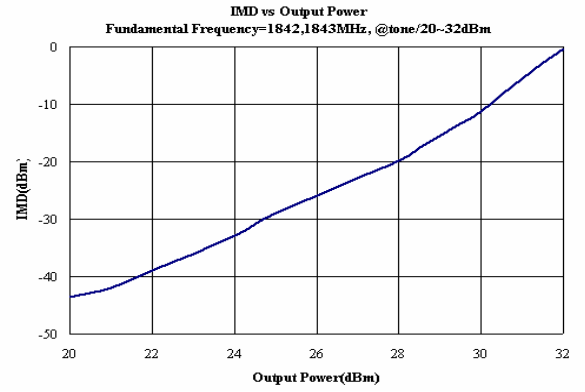
▪ Version 5.3

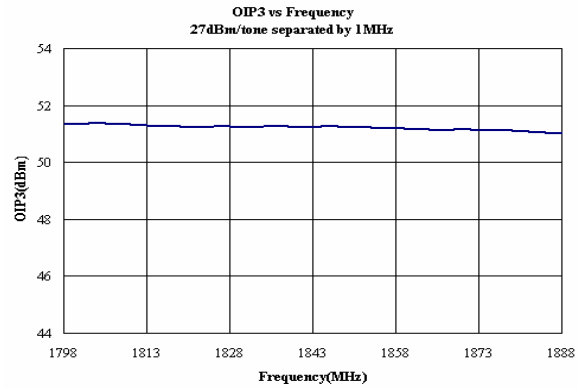
Performance Charts (V_d=9V, I_d=1.2A, T=25℃)

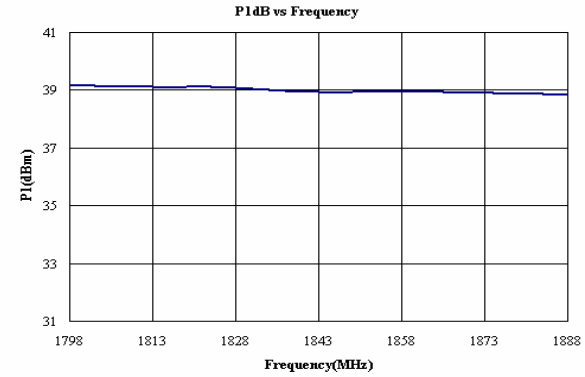


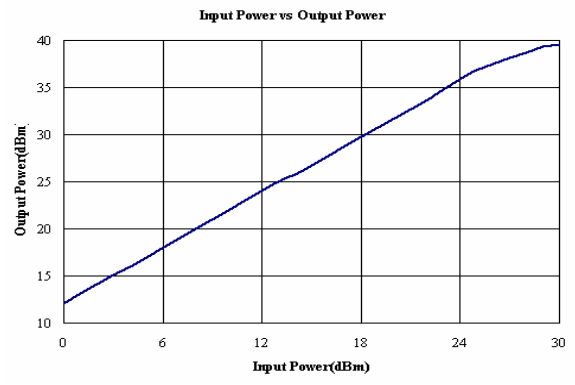




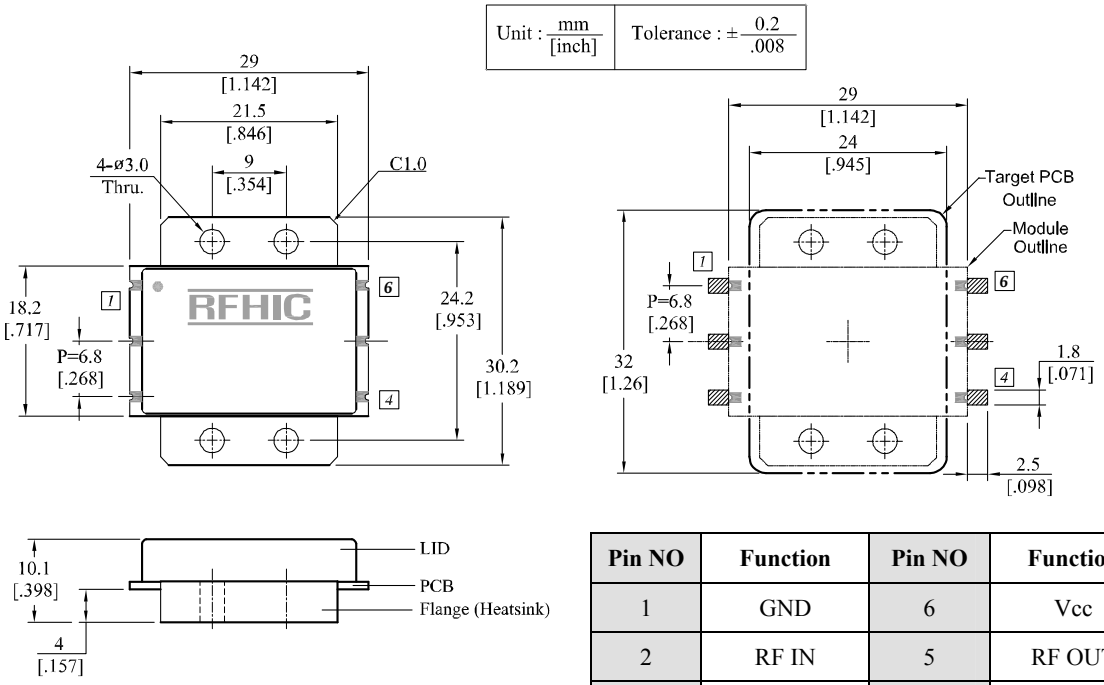






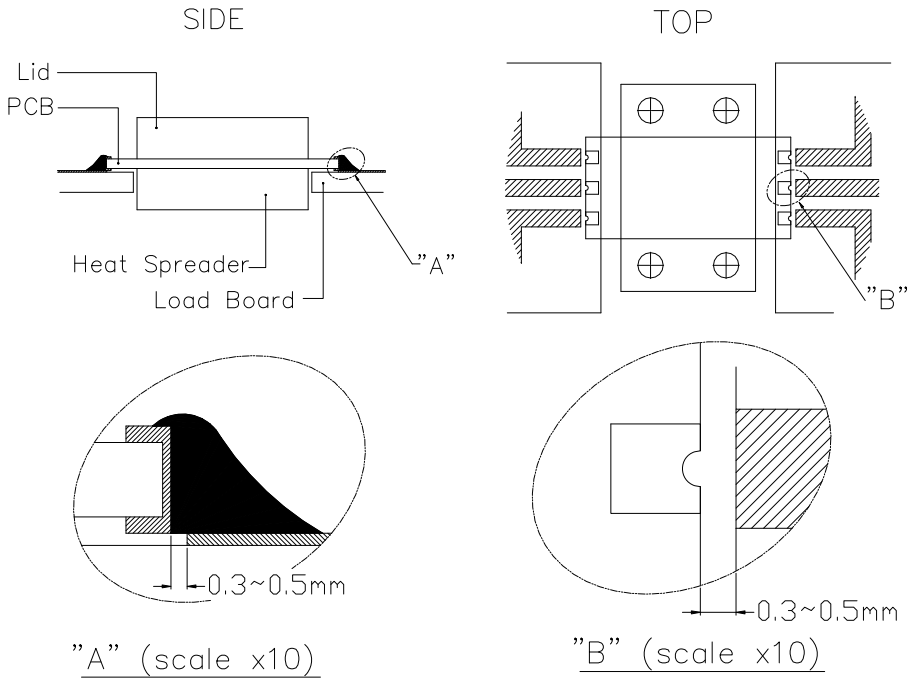


Package Dimensions (Type: DP-36)



Pin NO	Function	Pin NO	Function
1	GND	6	Vcc
2	RF IN	5	RF OUT
3	GND	4	E/N

Installation Guideline



★ It can be easily removed with solder wick and other removable material.

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