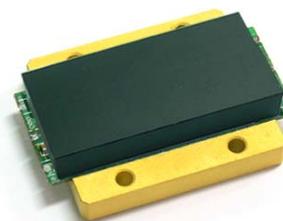


### Product Features

- Small size by using simple matching circuit board
- Single Supply Voltage
- Heat sink 99.9% copper, gold plated
- High Productivity
- Low Manufacturing Cost
- GaAs HFET

### Application

- UMTS Repeater
- RF Sub-Systems
- Base Station



Package : DP-56

### Description

The power amplifier module is designed for base stations and cell extenders and operating frequency range is from 1.9GHz to 3.5GHz

GaAs HFET 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 HFET 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

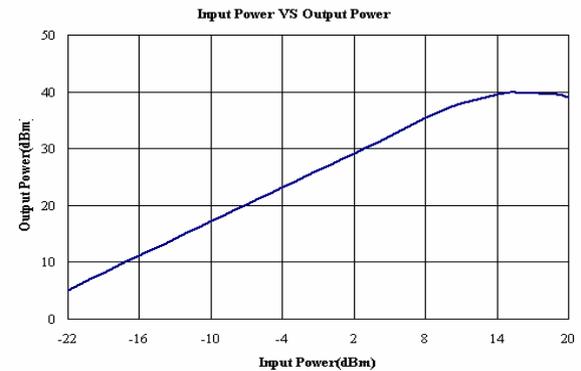
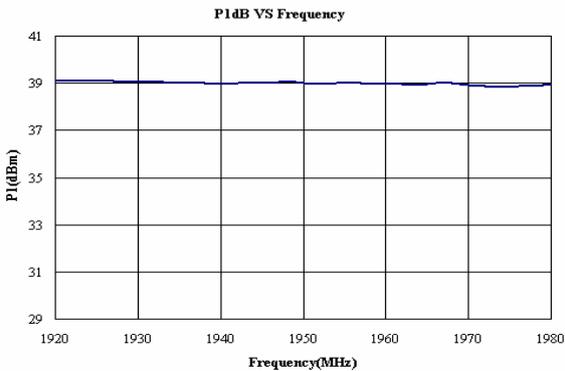
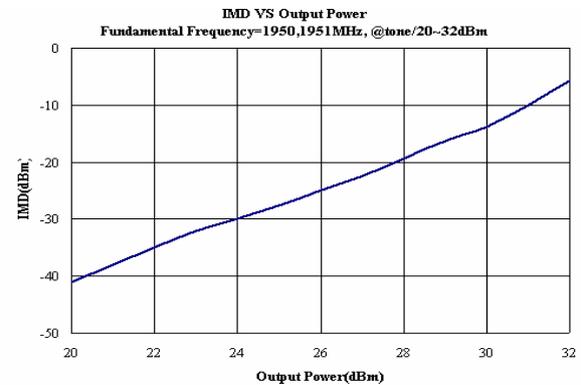
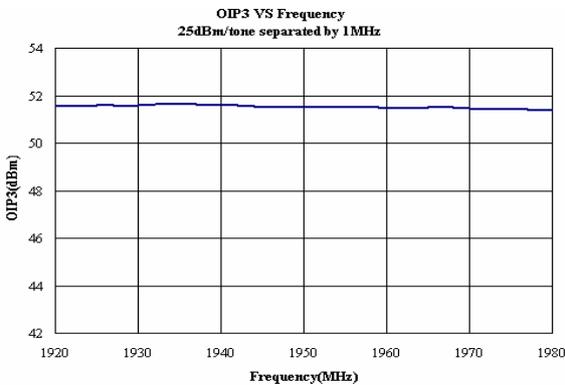
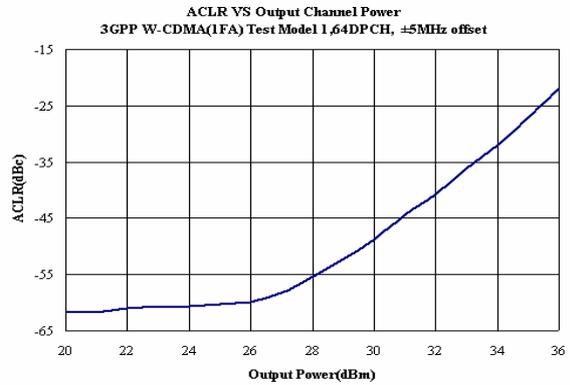
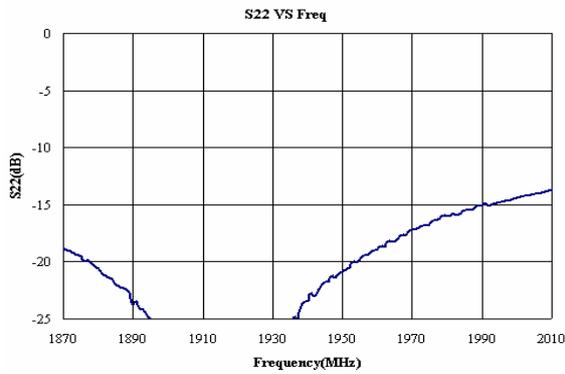
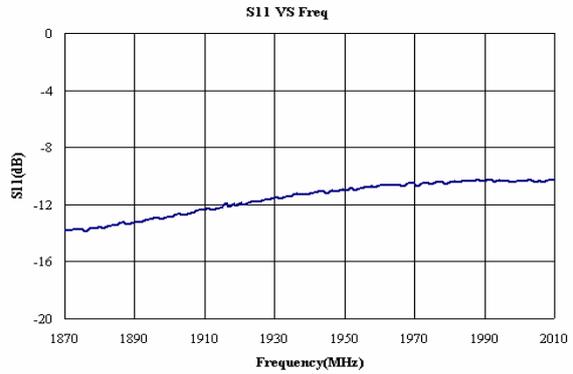
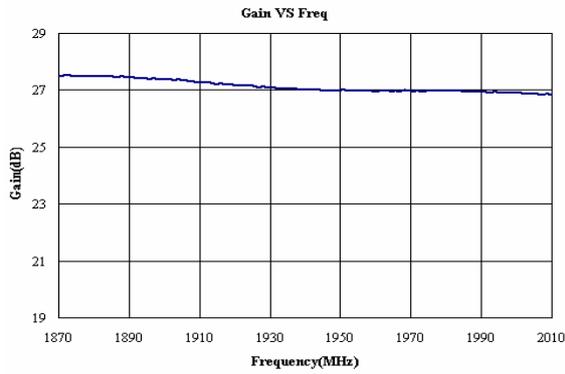
PARAMETER	RFT1950-08
Frequency Range (MHz)	1920 ~ 1980
Small Signal Gain (dB)	27
Gain Flatness (Max.)	± 1dB @ 50MHz BW
Input Return Loss	-10dB
Output P1dB	38 dBm
W-CDMA Power (1 FA)	30dBm @ -45dBc ACLR
Output IP3	51dBm @ tone / 25dBm
Noise Figure (Typ.)	4 dB
Drain Voltage	9V
Drain Current	1.5A
Operating Temp Range	-20°C ~ +70°C
Dimensions (W×L×H)	32.0 × 44.0 × 10.0 [mm]

#### NOTE

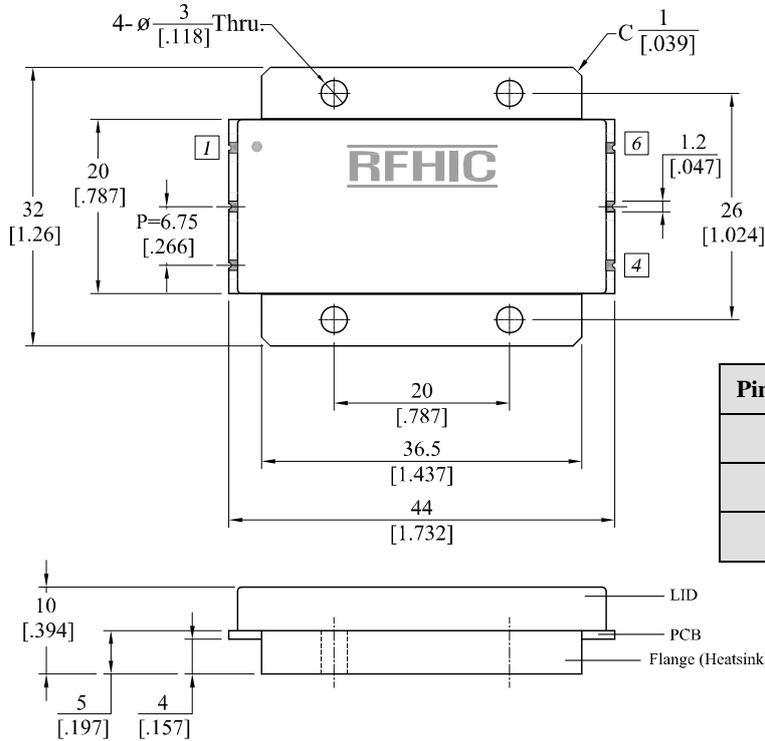
\*Test condition: 1950MHz, 3GPP W-CDMA signal modulation  
Test Model 1, 64DPCH, 3.84MHz BW, ±5MHz offset

\* RFT Series : Internally Matched Module

## Performance Charts ( $V_d=9V$ , $I_d=1.5A$ , $T=25^\circ C$ )



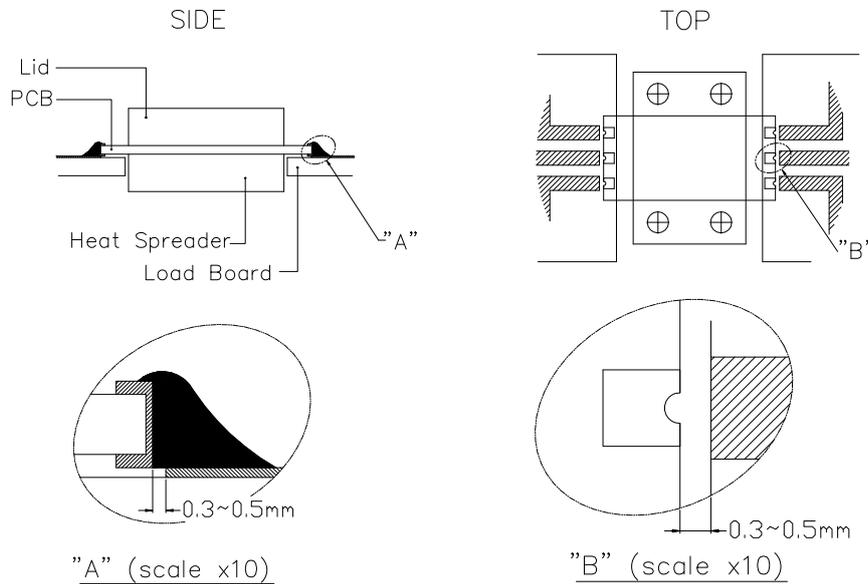
Package Dimensions (Type: DP-56)



Unit : $\frac{\text{mm}}{\text{[inch]}}$	Tolerance : $\pm \frac{0.2}{.008}$
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Pin NO	Function	Pin NO	Function
1	GND	6	Vcc
2	RF IN	5	RF OUT
3	E/N	4	GND

Installation Guideline



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

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