

# **Preliminary**

### DRC23000M

20GHz to 26GHz Driver Amplifier

### **Application**

Point to Point Radio SATCOM

### **Features**

• Frequency range: 20 ~ 26 GHz

• Power: 16 dBm P1dB

• Gain: 20 dB

• OIP3: 26 dBm at 10 dBm/tone

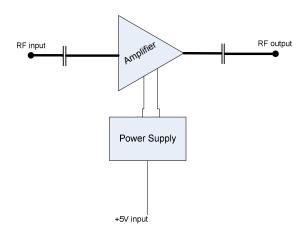
• Single +5V power supply

• 1.2x1.05x0.6 inch package

• RF connectors: SMA



### Functional Block Diagram



#### General Description

The DRC23000M is a K-band Driver amplifier module with integrated power supply circuit providing more than 16dBm output power from 20 to 26 GHz frequency band. This high gain power amplifier has a typical 20dB gain over its frequency range. With 26dBm third order intercept point, DRC23000M is one the best options for high gain amplifier chain where a driver with minimum none-linear effects is required. The integrated single +5V power supply and small modular configuration with SMA connectors for input and output make this amplifier easy to use in any system on this band.



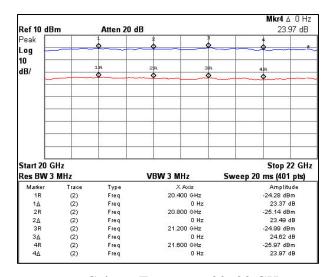
### Absolute Maximum Rating

Parameter	Rating
Power supply	7 V
RF input power	0 dBm
Storage temperature	-40 to 150 °C
Operational body temperature	-40 to 65 °C

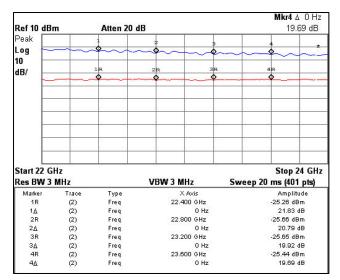
### **Specifications**

Parameter	Condition	Min	Тур	Max	Unit
Frequency		20		26	GHz
Gain		19	20	24	dB
Vd			5		V
Id			300	350	mA
Pout	1dB		16		dBm
Input VSWR				3:1	
Output VSWR				3:1	
Isolation		40			dB
OIP3	10dBm/tone		26		dBm
NF			7		dB
Temperature		-40		55	°C

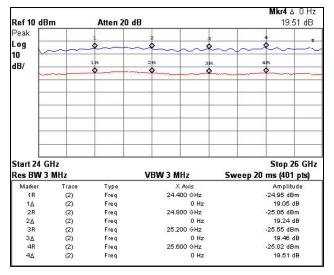
## Typical Performance Graphs



Gain vs Frequency 20~22 GHz

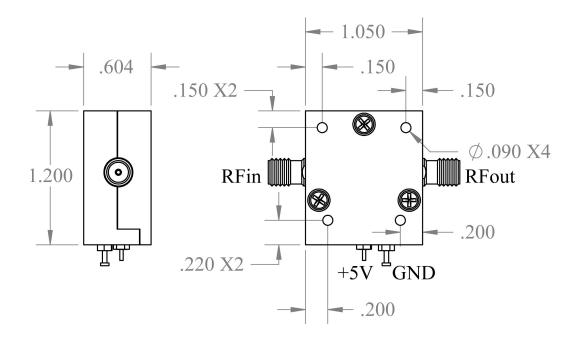


Gain vs Frequency 22~24 GHz



Gain vs Frequency 24~26 GHz

### Dimension



# Custom Design

The Gain of this driver amplifier can be customized. To order a customized module, please contact ZComm.