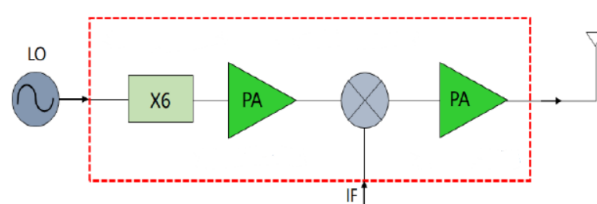


220GHz 上变频发射模块

220GHz Up-Converters Transmitter Module

Product Features

- Frequency: 210-228GHz
- Output power: 9.5dBm
- Upconverter Gain: 8dB
- DC power supply: 7V@550mA
- Built-in voltage regulator circuit
- For 6G/7G Applications



Electrical Specs(V=7V, I=550mA, TA=+25℃):

Parameter	Minimum	Typical	Maximum
Output Frequency(GHz)	210		228
LO Frequency(GHz)	17.5		19
IF Frequency(GHz)	DC		5
Upconverter Gain(dB)		8	
Max. Output Power(dBm)		9.5	
P1dB output power (dBm)		8	
LO Power(dBm)	14	15	18
IF Power(dBm)			10
VSWR@ RF Port		2.3	
VSWR @ IF Port		3	
DC Voltage(V)	5	7	10
DC Supply Current(mA)		550	
Operating Temperature(℃)	+10	+25	+40

Mechanical Specs:

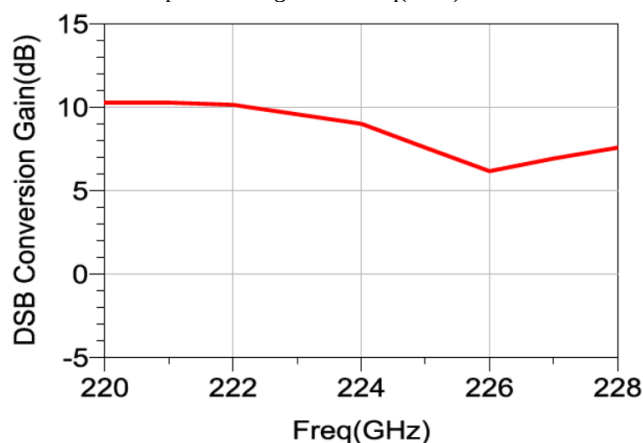
Item	Specification
Size (W×L×H)	158.4mm*30mm*22mm

Measured Performance (TA=+25°C, V=7V) :

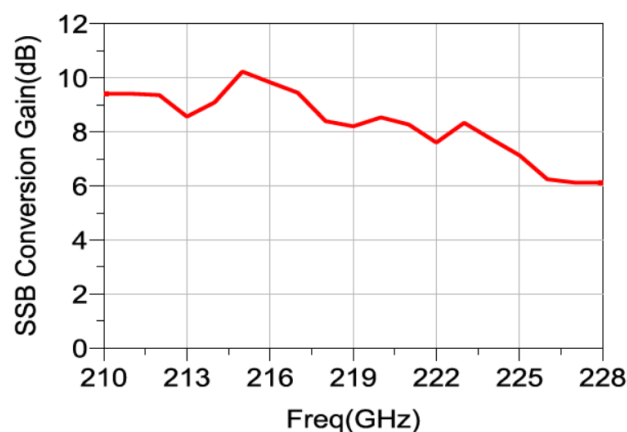
Freq_LO=220GHz, Freq_IF= 1~8GHz;
Pwr_LO=15dBm

Freq_IF=1GHz, Freq_IF= Freq_RF- Freq_LO;
Pwr_IF=-15dBm, Pwr_LO=15dBm

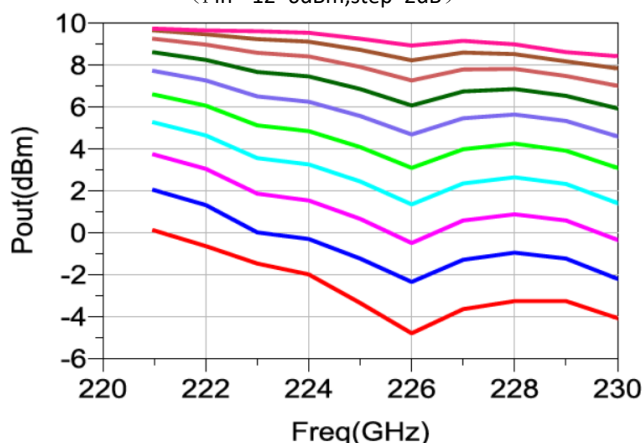
Upconverter gain vs. Freq(DSB)



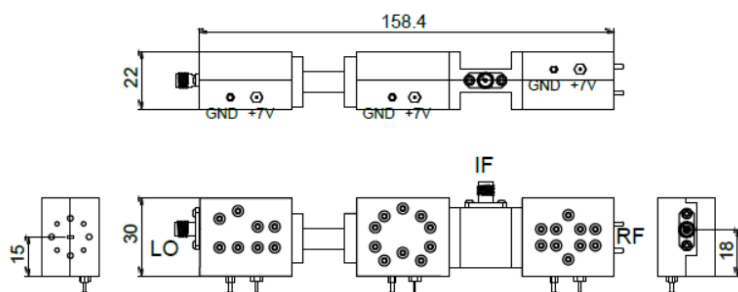
Upconverter gain vs. Freq(SSB)



Output power vs. Freq(DSB)
(Pin=-12~6dBm,step=2dB)



Mechanical Outline:



Symbol	Function
RF	RF port, WR4 Waveguide with W/UG-387/U-M
LO	LO port, 2.92mm-K
IF	IF port, 2.92mm-K
+7V	DC port
GND	Ground

Notes:

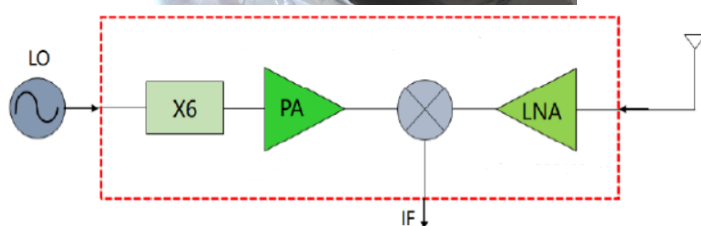
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is the typical performance for the reference.

220GHz 下变频接收模块

220GHz Down-Converters Receiver Module

Product Features

- Frequency: 210-228GHz
- NF: 7.8dB
- Downconverter Gain: 13dB
- DC power supply: 7V@400mA
- Built-in voltage regulator circuit
- For 6G/7G Applications



Electrical Specs(V=7V, I=400mA, TA=+25°C):

Parameter	Minimum	Typical	Maximum
Output Frequency(GHz)	210		228
LO Frequency(GHz)	17.5		19
IF Frequency(GHz)	DC		5
Downconverter Gain(dB)		13	
Noise Figure (dB)		7.8	
P1dB Input Power (dBm)		-30	
LO Power(dBm)	14	15	18
RF Input Power(dBm)			10
VSWR@ RF Port		1.8	
VSWR @ IF Port		2.2	
DC Voltage(V)	5	7	10
DC Supply Current(mA)		400	
Operating Temperature(°C)	+10	+25	+40

Mechanical Specs:

Item	Specification
Size (W×L×H)	158.4mm*30mm*22mm

