

G-band Spectrum Frequency Extension Systems

140-220GHz/WR-5.1

Model: TISM-140220-12-05

TISM-140220-12-05 spectrum frequency extension systems are a dedicated Test & Measurement solution for extending the range of your signal source to 140-220 GHz.

Features:

- Frequency range: 140-220 GHz
- Conversion Loss SSB: 10dB Typ
- Low conversion loss

Applications:

- Frequency Extension
- Antenna measurements
- Material characterisation

电气特性 Electrical Characteristics:

| 参数 Parameter | Min | Typ | Max | 单位 Units |
|--------------------------------|-------|-----|-------|----------|
| 频率范围 Frequency range | 140 | | 220 | GHz |
| 中频输出频率 IF Output Frequency | DC | | 5 | GHz |
| 本振输入频率 LO Input Frequency | 11.66 | | 18.34 | GHz |
| 本振输入功率 LO Input Power | 13 | 15 | 20 | dBm |
| 倍频次数 Multiplication Factor | | 12 | | |
| 射频输入功率 RF Input Power | | -10 | 0 | dBm |
| 变频损耗 Mixer Conversion Loss SSB | | 10 | | dB |

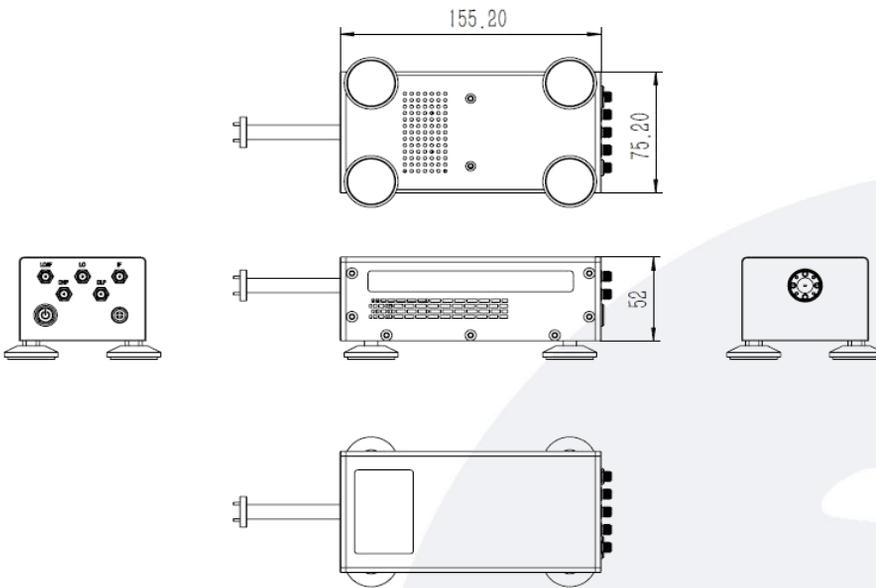
机械特性 Mechanical Specifications:

| 描述 Description | 参数 Parameter | 单位 Units |
|------------------------|-----------------|----------|
| 射频输入端口 RF Input Ports | WR-5.1/UG-387/U | |
| 本振/中频端口 LO/IF Ports | SMA Female | |
| 本振输入端口 LO Input Ports | SMA Female | |
| 中频输出端口 IF Output Ports | SMA Female | |
| 供电引脚 Power Supply Pin | FGG 0B 4 Core | |
| 尺寸 Size | 155.2*75.2*52 | mm |

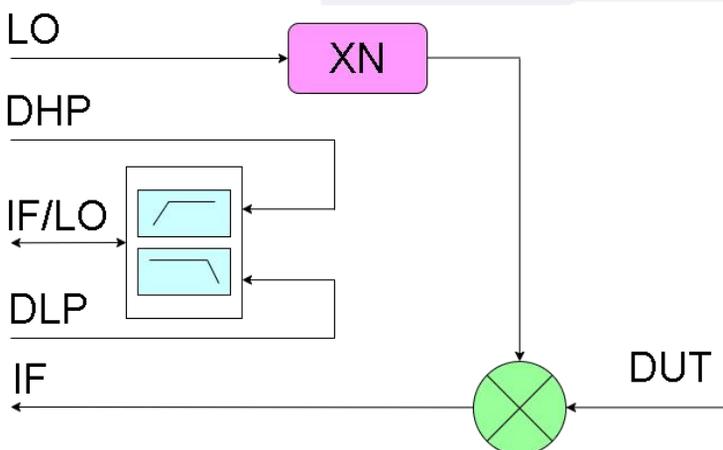
绝对最大值 Absolute Maximum Ratings :

| 参数 Parameter | 指标 Value |
|------------------------------|----------------------|
| 供电电压 Supply Bias Voltage | +240 V AC |
| 射频输入功率 RF Input Power | 0 dBm |
| ESD灵敏度 ESD sensitivity (HBm) | Class 0, passed 150V |

外形图 Outline Drawing: Unit:mm



原理框图 Block Diagrams:



环境和物理特性 Environmental And Physical Characteristics:

| 参数 Parameter | Min | Typ | Max | 单位 Units |
|------------------------------------|---|-----|-----|----------|
| 操作温度 Operating Temperature | -10 | | +65 | °C |
| 存储温度 Non-operating Temperature | -45 | | +85 | °C |
| 相对湿度 Relative humidity | | 95 | | % |
| 海拔 Altitude | 10,000 | | | feet |
| 震动 Shock / Vibration(MIL-STD-810F) | 25g rms (15 degree 2KHz) endurance, 1 hour per axis | | | |
| 冲击 Shock(non operating) | 20G for 11msc half sin wave,3 axis both directions | | | |

订货信息 Ordering Information:

| 标准型号 Part Number | 描述 Description | 版本号 Revision |
|-------------------|---|--------------|
| TLSM-140220-12-05 | G-Band Spectrum Frequency Extension Systems X12,140-220GHz, Conversion Loss SSB: 10dB typ. | Rev.1.2 |

随货配件 Components Included:

| 标准型号 Part Number | 描述 Description | 数量 Quantity |
|------------------|------------------------|-------------|
| TACTDC-22012 | AC-to-DC Power Adapter | 1 PCS |