

## W-band Spectrum Frequency Extension Systems

75-110GHz /WR-10

Model: TLSM-075110-06-10

TLSM-075110-06-10 spectrum frequency extension systems are a dedicated Test & Measurement solution for extending the range of your signal source to 75-110 GHz.

### Features:

- Frequency range: 75-110 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           | 75   |     | 110   | GHz      |
| 中频输出频率 IF Output Frequency     | DC   |     | 5     | GHz      |
| 本振输入频率 LO Input Frequency      | 12.5 |     | 18.33 | GHz      |
| 本振输入功率 LO Input Power          | 13   | 15  | 20    | dBm      |
| 倍频次数 Multiplication Factor     |      | 6   |       |          |
| 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:

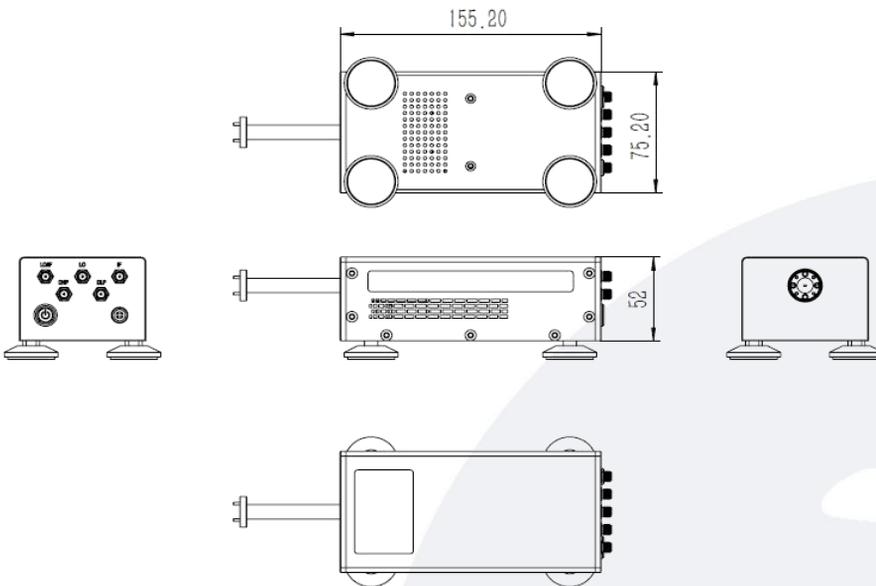
| 描述 Description         | 参数 Parameter   | 单位 Units |
|------------------------|----------------|----------|
| 射频输入端口 RF Input Ports  | WR-10/UG-387/U |          |
| 本振/中频端口 LO/IF Ports    | SMA Female     |          |
| 本振输入端口 LO Input Ports  | SMA Female     |          |
| 中频输出端口 IF Output Ports | 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 :

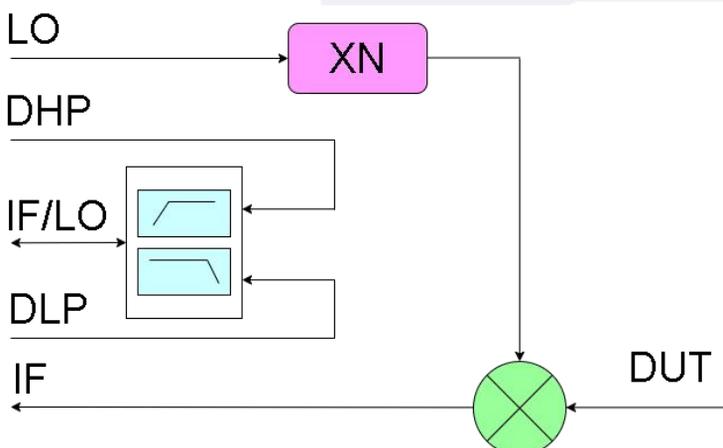
| 参数 Parameter                 | 指标 Value             |
|------------------------------|----------------------|
| 供电电压 Supply Bias Voltage     | +240 V AC            |
| 射频输入功率 RF Input Power        | 0 dBm                |
| ESD灵敏度 ESD sensitivity (HBm) | Class 0, passed 150V |

### 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-075110-06-10 | W-Band Spectrum Frequency Extension Systems<br>X6,75-110GHz, 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       |