

## Down-conversion Extension Systems

### 40-67GHz/1.85mm Female

Model: TLSM-040067-04-1.85

TLSM-040067-04-1.85 down-conversion extension systems are a dedicated Test & Measurement solution for extending the range of your signal source to 40-67 GHz.

#### Features:

- Frequency range: 40-67 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           | 40  |     | 67    | GHz      |
| 中频输出频率 IF Output Frequency     | DC  |     | 21    | GHz      |
| 本振输入频率 LO Input Frequency      | 10  |     | 16.75 | GHz      |
| 本振输入功率 LO Input Power          | 3   | 5   | 7     | dBm      |
| 倍频次数 Multiplication Factor     | 4   |     |       |          |
| 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:

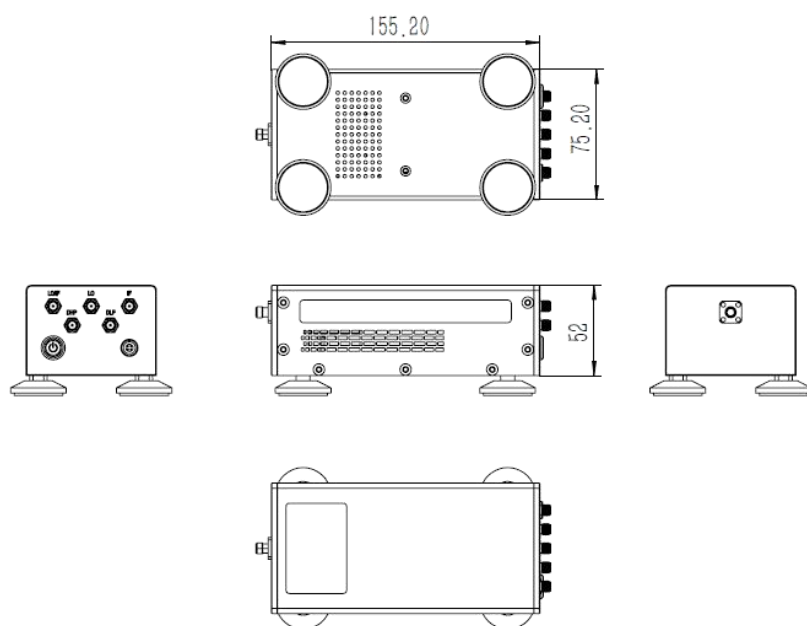
| 描述 Description         | 参数 Parameter  | 单位 Units |
|------------------------|---------------|----------|
| 射频输入端口 RF Input Ports  | 1.85mm Female |          |
| 本振输入端口 LO Input Ports  | SMA Female    |          |
| 中频输出端口 IF Output Ports | 2.92mm Female |          |
| 供电引脚 Power Supply Pin  | FGG 0B 4 Core |          |
| 尺寸 Size                | 155.2*75.2*52 | mm       |

## 绝对最大值 Absolute Maximum Ratings :

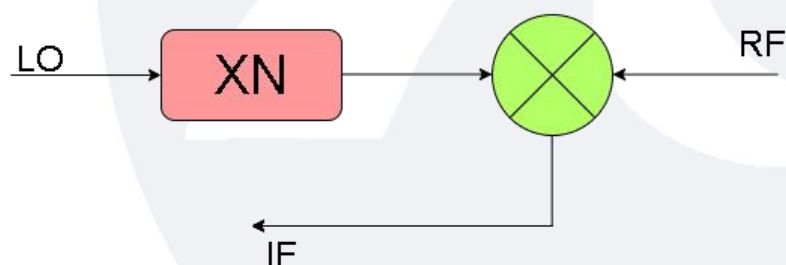
| 参数 Parameter                 | 指标 Value             |
|------------------------------|----------------------|
| 供电电压 Supply Bias Voltage     | +240 V AC            |
| 本振输入功率 LO Input Power        | +10 dBm              |
| 射频输入功率 RF Input Power        | 0 dBm                |
| ESD灵敏度 ESD sensitivity (HBm) | Class 0, passed 150V |

## 外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



## 原理框图 Block Diagrams:



## 环境和物理特性 Envrionmental 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-040067-04-1.85 | Down-conversion Extension Systems<br>X4,40-67GHz, 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 |
|------------------|------------------------|-------------|
| TLACTDC-22012    | AC-to-DC Power Adapter | 1 PCS       |