

## Cryogenic Low pass Filter

### DC-8GHz/SMA Male to Female

**Model: TLLF-DC-8G-T2-Cryo**

#### Features:

- Passband Frequency Range DC to 8GHz
- Low Insertion Loss
- Excellent Return Loss
- High Stop Band Suppression

#### Applications:

- Instrumentations
- Test Labs
- Sub-assemblies

#### Electrical Characteristics:

| Parameter                |           | Min | Typ | Max | Units |
|--------------------------|-----------|-----|-----|-----|-------|
| Passband Frequency range |           | DC  |     | 8   | GHz   |
| Passband Return Loss     |           |     | -20 |     | dB    |
| Passband Insertion Loss  |           |     | 0.5 |     | dB    |
| Stopband Suppression     | @11GHz    |     | 30  |     | dB    |
|                          | @15-32GHz | -40 | -55 |     | dB    |
| RF Power (W)             |           |     |     | 1   | W     |
| Impedance                |           | 50  |     |     | Ohms  |

#### Envrionmental And Physical Characteristics:

| Description             | Parameter           | Units |
|-------------------------|---------------------|-------|
| Input /Output Connector | SMA Male/SMA Female |       |
| Case Material           | OFHC Copper         |       |
| Finish                  | Gold Plated         |       |
| Weight                  | 30                  | g     |

## Outline Drawing:

Unit:mm



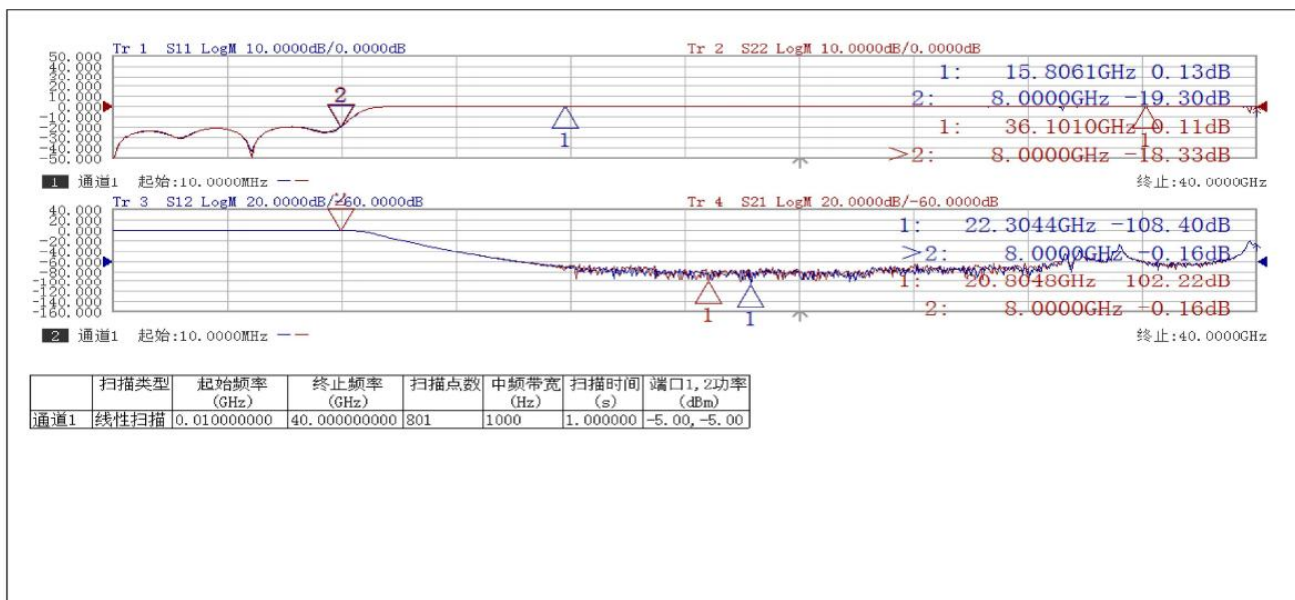
## Environmental Conditions:

| Parameter                       | Min                                                 | Typ | Max  | Units |
|---------------------------------|-----------------------------------------------------|-----|------|-------|
| Operating Temperature           | mK                                                  |     | +100 | °C    |
| Non-operating Temperature       | -55                                                 |     | +85  | °C    |
| Relative humidity               |                                                     | 95  |      | %     |
| Altitude                        | 10,000                                              |     |      | feet  |
| Shock / Vibration(MIL-STD-810F) | 25g rms (15 degree 2KHz) endurance, 1 hour per axis |     |      |       |
| Shock(non operating)            | 20G for 11msc half sin wave,3 axis both directions  |     |      |       |

## Ordering Information:

| Base Number        | Description                                                                                                | Revision |
|--------------------|------------------------------------------------------------------------------------------------------------|----------|
| TLLF-DC-8G-T2-Cryo | Coaxial Low pass Filter,Passband frequency range:DC-8GHz,Passband Insertion Loss:0.5dB, SMA Male to Female | Rev.1.1  |

## Typical Performance Data:



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.