

## V Band Compact Level Setting Attenuator

### WR-15/50-75GHz/0-30dB Attenuation

### Model: TLSA-30-WR15

TLSA-30-WR15 is a compact level setting attenuator that covers the frequency range from 50 to 75 GHz. High precision micrometer drive is used for smooth adjustment. The input and output port configuration offers an inline structure with WR-15 waveguides and UG-385/U-M anticocking flanges. These level setting attenuators are with flatness attenuation value and good return loss. They are widely used in test equipment and communication systems.

#### Features:

- Full Band Coverage
- Low insertion Loss:0.3dB
- Attenuation Range:0-30dB
- Good attenuation flatness
- Good Return Loss

#### Applications:

- Test Equipment
- RF Over Fiber
- Communication Systems
- Radar Systems

#### Electrical Characteristics:

| Parameter                 |                   | Min | Typ  | Max | Units |
|---------------------------|-------------------|-----|------|-----|-------|
| Frequency range           |                   | 50  |      | 75  | GHz   |
| Insertion Loss            |                   |     | 0.3  |     | dB    |
| Attenuation Range         |                   |     | 0-30 |     | dB    |
| Attenuation Flatness      | @10dB Attenuation |     | ±1   |     | dB    |
|                           | @20dB Attenuation |     | ±1.5 |     |       |
|                           | @30dB Attenuation |     | ±2   |     |       |
| Return Loss               |                   |     | -20  |     | dB    |
| Power Handling            |                   |     |      | 100 | mW    |
| Specification Temperature |                   |     | +25  |     | °C    |

## Mechanical Specifications:

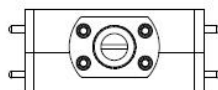
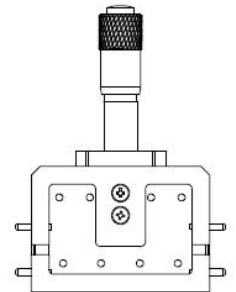
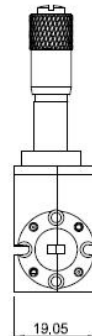
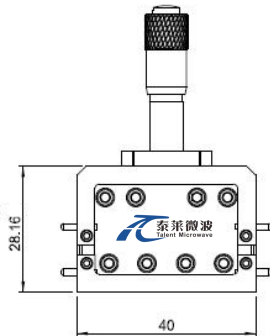
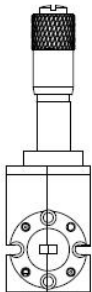
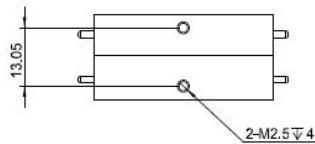
| Parameter               | Value            | Units |
|-------------------------|------------------|-------|
| Input /Output Connector | WR-15/UG-385/U-M |       |
| Material                | Brass            |       |
| Finish                  | Gold Plated      |       |
| Size                    | 40x28.16x19.05   | mm    |

## Absolute Maximum Ratings:

| Parameter      | Value  |
|----------------|--------|
| RF Input Power | +20dBm |

## Outline Drawing:

Unit:mm; Tolerance:±0.1mm



### Environmental Conditions:

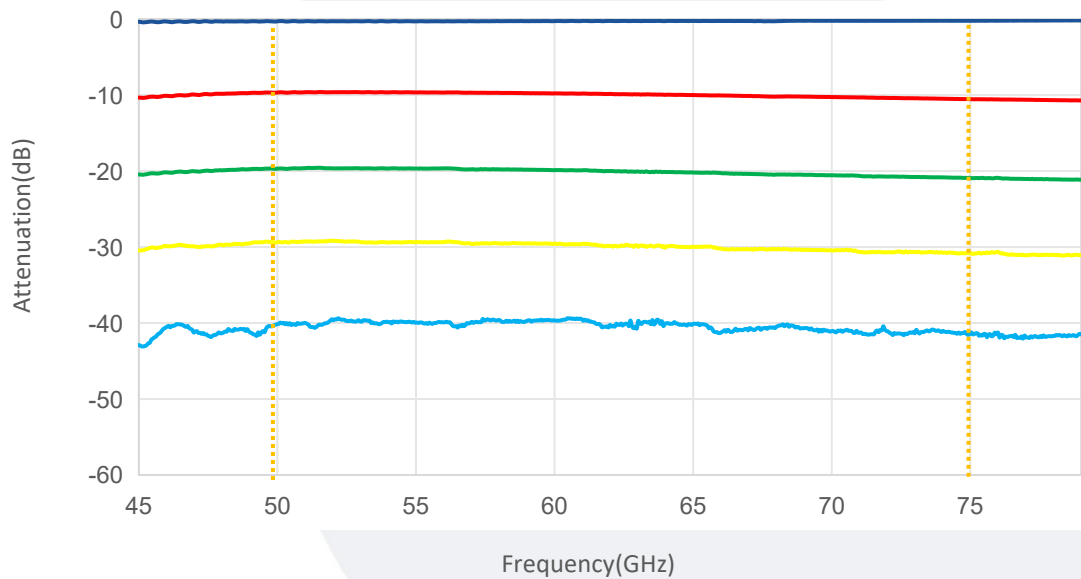
| Parameter                       | Min                                                 | Typ | Max | Units |
|---------------------------------|-----------------------------------------------------|-----|-----|-------|
| Operating Temperature           | -10                                                 |     | +65 | °C    |
| Non-operating Temperature       | -45                                                 |     | +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 |
|--------------|---------------------------------------------------------------------|----------|
| TLSA-30-WR15 | WR-15 Waveguide Compact Level Setting Attenuator;0-30dB Attenuation | Rev.1.0  |

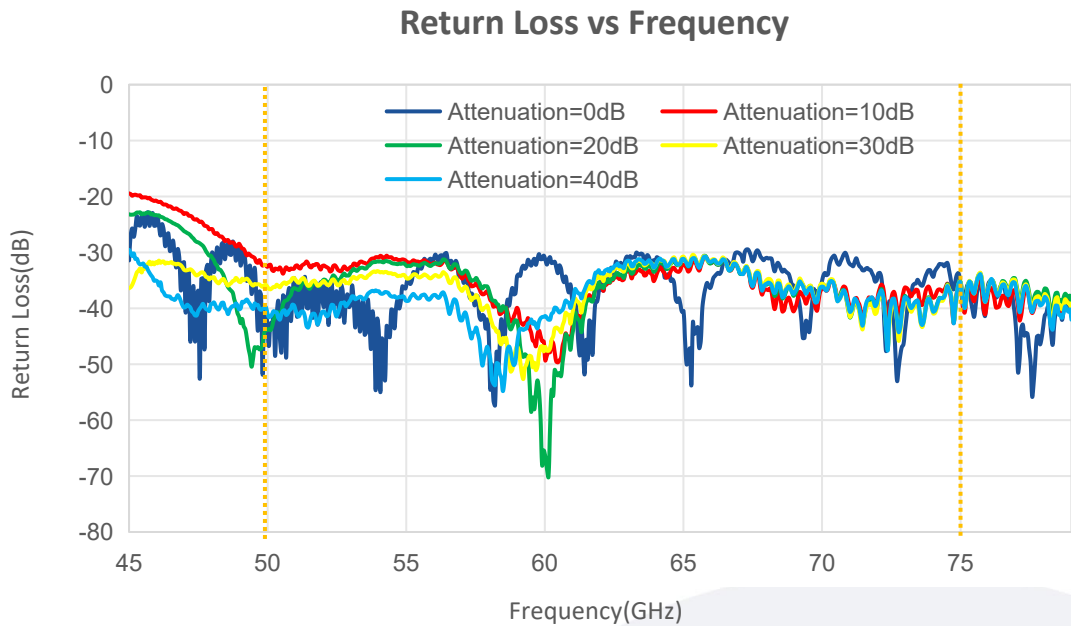
### Typical Performance Data:

Attenuation vs Frequency



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.

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