

## A11 Series (L29 Male-ST to L29 Male-ST)

### LL480, High Power Cable Assembly, 50ohms, DC-7.5GHz



## A11-49-49-"L" (L: Length)

#### Maximum Ratings

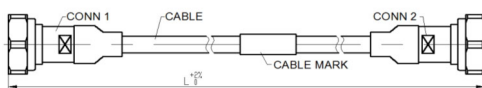
Operating Temperature -55°C to +85°C

Storage Temperature -55°C to +85°C

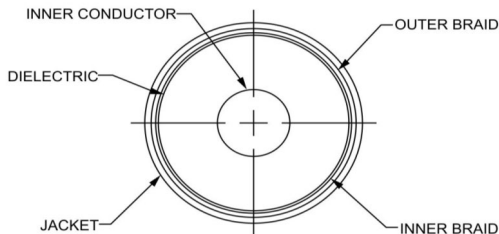
Permanent damage may occur if any of these limits are exceeded

|                           |         |         |
|---------------------------|---------|---------|
| Cable Diameter            |         | 12.19mm |
| Velocity of Propagation   |         | 83%     |
| Shielding Effectiveness   |         | >95dB   |
| Power Handling at<br>40°C | 1 GHz   | 1835W   |
|                           | 2 GHz   | 1330W   |
|                           | 3 GHz   | 1024W   |
|                           | 5 GHz   | 790W    |
|                           | 6 GHz   | 705W    |
|                           | 7.5 GHz | 627W    |
| Min. Bending Radius       |         | 70mm    |

Outline Drawing Unit [mm]



Cable Cross Section



Cable Construction

|                 |                            |
|-----------------|----------------------------|
| Inner Conductor | Solid Silver Plated Copper |
| Dielectric      | Expanded PTFE Tape         |
| Inner Braid     | Silver-Plated Copper Strip |
| Outer Braid     | Silver-Plated Copper Braid |
| Jacket          | FEP                        |

Connectors

- Nut, Brass, Nickel Plated
- Body, Brass, Nickel Plated
- Center contacts, Beryllium Copper, Gold plated
- Dielectric, PTFE, Natural

#### Product Guarantee\*

Micable will repair or replace your cable assembly if it fails within six months after shipment. This guarantee excludes product damage from misuse or abuse

#### Features

- Frequency up to 7.5GHz
- Stainless steel connectors for long mating-cycle life
- High shielding effectiveness, >95dB
- Excellent phase stability over temperature, 220ppm@+22°C~+85°C
- Low loss, low VSWR
- Super high power handling

#### Applications

- High power transmitter
- High Power Amplifier systems
- RF/Microwave test systems
- Airborne, shipborne and ground systems
- Phase array radars
- Power amplifier systems

| Freq.<br>(GHz) | Length<br>(m) | Insertion Loss (dB@GHz) |      |       |      |       |      |         |      | VSWR (@GHz) |      |       |      |       |      |         |      |
|----------------|---------------|-------------------------|------|-------|------|-------|------|---------|------|-------------|------|-------|------|-------|------|---------|------|
|                |               | DC - 1                  |      | 1 - 3 |      | 3 - 6 |      | 6 - 7.5 |      | DC - 1      |      | 1 - 3 |      | 3 - 6 |      | 6 - 7.5 |      |
|                |               | Typ.                    | Max. | Typ.  | Max. | Typ.  | Max. | Typ.    | Max. | Typ.        | Max. | Typ.  | Max. | Typ.  | Max. | Typ.    | Max. |
| DC-7.5         | 0.5           | 0.1                     | 0.2  | 0.2   | 0.3  | 0.3   | 0.4  | 0.4     | 0.5  | 1.08        | 1.13 | 1.16  | 1.21 | 1.26  | 1.35 | 1.33    | 1.40 |
|                | 1             | 0.2                     | 0.3  | 0.3   | 0.4  | 0.5   | 0.6  | 0.6     | 0.7  |             |      |       |      |       |      |         |      |
|                | 2             | 0.3                     | 0.4  | 0.4   | 0.5  | 0.8   | 0.9  | 0.9     | 1.0  |             |      |       |      |       |      |         |      |
|                | 3             | 0.4                     | 0.5  | 0.6   | 0.7  | 1.1   | 1.2  | 1.2     | 1.3  |             |      |       |      |       |      |         |      |

Typical Performance Data (A11-49-49-1M)

| Frequency(MHz) | VSWR | Insertion Loss (dB) |
|----------------|------|---------------------|
| 50             | 1.03 | 0.05                |
| 1000           | 1.08 | 0.18                |
| 2000           | 1.12 | 0.26                |
| 2500           | 1.16 | 0.31                |
| 4000           | 1.18 | 0.37                |
| 5000           | 1.21 | 0.42                |
| 6000           | 1.26 | 0.47                |
| 7500           | 1.33 | 0.51                |

