

Clarity™ 110

Test and Measurement

The Clarity™ 110 test cable boasts steel torque crush and overbend protection with abrasion resistance - without compromising flexibility. The cable is ultra-stable through 110 GHz with exceptionally low attenuation. The design includes an ergonomic, stainless steel protective barrel strain relief and a hex coupling nut.



Features:

- Broad Frequency Response
- Rugged & Durable
- Phase Stable Over Temperature
- Long Flex Life

Specifications

Ω Impedance
50 Ohms

Op Temp
-67 to 257°F
-55 to 125°C

Units

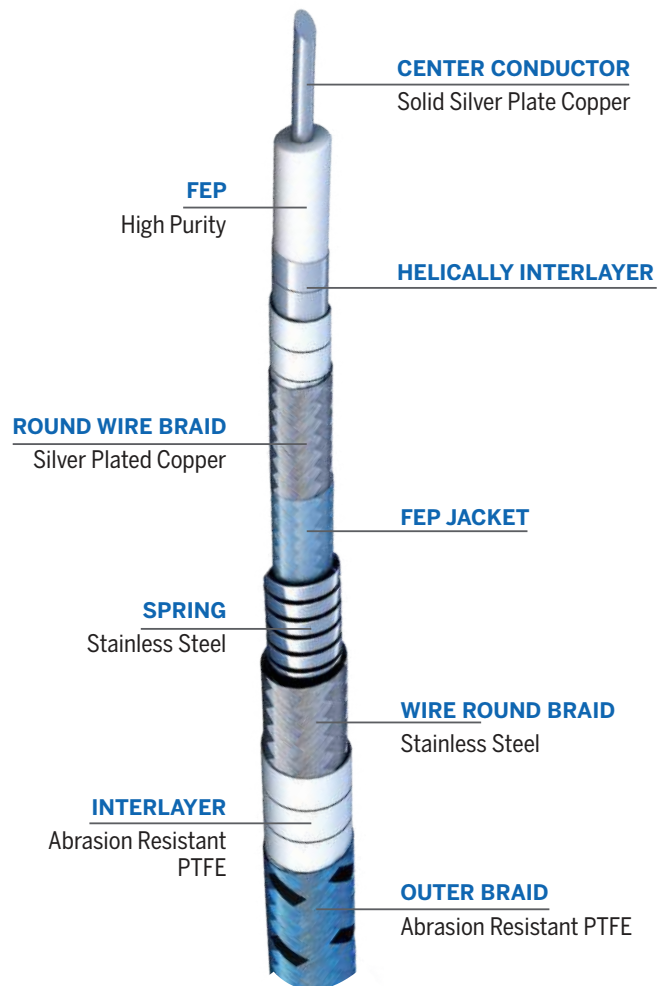
| | Units | |
|-----------------------------------|--------------|-------------|
| Armored Diameter: armor | in (mm) | 0.19 (4.70) |
| Armored Diameter: strain relief | in (mm) | 0.31 (8.00) |
| Minimum Bend Radius armored | in (mm) | 1.0 (25.4) |
| Minimum Bend Radius max flex life | in (mm) | 2.0 (50.8) |
| Crushing (armored version) | lbs/lin.in | 200 |
| Flex Life | | >50000 |
| Velocity of Propagation | % | 70 |
| Shielding Effectiveness | dB | >100 |
| Capacitance | pF/ft (pF/m) | 29 (95) |
| VSWR Typical | | 1.40:1 |
| VSWR Max | | 1.45:1 |
| Phase Stability typical* | ° | +/- 2 |
| Amplitude Stability typical* | dB | +/- 0.075 |

*The assembly is terminated with a short circuit and bent 90 degrees around the mandrel of 1-inch radius.

Attenuation @77°F (+25°C)

| Frequency GHz | dB/100 ft | dB/100 m |
|---------------|-----------|----------|
| 110 | 500 | 1640 |

Attenuation (per 100ft) at any frequency:
 $1.0932 * \sqrt{f(\text{MHz})} + 0.00125 * f(\text{MHz})$



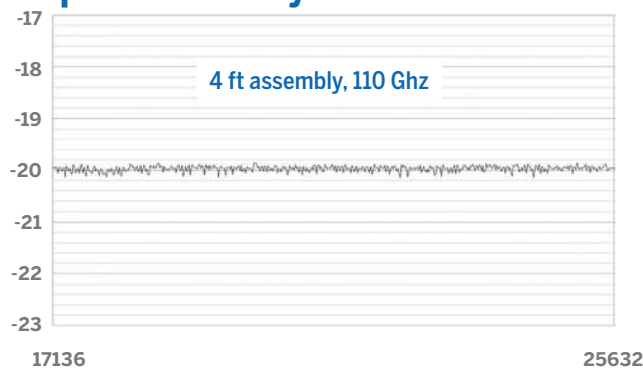
Ordering Guide

CLS110 - 10M 10M - 10.00M

- Connector A Connector B - Length M Meters
F Feet

| CODE | Description |
|------|------------------------|
| 10M | 1.0mm Male Connector |
| 10F | 1.0mm Female Connector |

Amplitude Stability While in Motion



Phase Stability While in Motion



Our flex test method uses 4ft cables at 110GHz. The testing equipment calibration occurs every 8 hours. Email us at techquestions@timesmicro.com to obtain a copy of the test procedure specifications and results.



Global manufacturing capability: US, and Asia.



Heritage—in the air and on the ground, thousands of assemblies built over decades.



Assembled and tested assemblies provide assured performance.