67 GHz 2×8 High-Density Multi-Coax Cable Assembly

Multi-Channel Interface to 1.85 mm Female P/N: VST-L-TE70FF116C-XXX

PRODUCT OVERVIEW

The VST-L-TE70FF116C-XXX is a 16-channel (2×8) high-density multi-coax cable assembly operating from DC to 67 GHz. It combines a compact multi-channel interface with individual 1.85 mm female breakout connections and supports phase-matched, custom-length configurations.



DC-67 GHz	16	2.54 mm	1.85 mm
FREQUENCY	CHANNELS / 2X8	CHANNEL PITCH	FEMALE BREAKOUT

KEY FEATURES

- High-density 16-channel / 2×8 architecture
- DC to 67 GHz broadband operation
- Compact 2.54 mm channel pitch
- Individual 1.85 mm female breakout interfaces
- Phase matching: ±2 ps
- Custom cable assembly lengths available

SPECIFICATIONS

ELECTRICAL	
Frequency Range	DC to 67 GHz
Nominal Impedance	50 Ω per coaxial channel
Return Loss	≥ 10 dB
Insertion Loss	≤ (11.5 × L / 1000) + 1.2 dB
Phase Matching	±2 ps
Test Voltage	300 Vrms

MECHANICAL & ENVIRONMENTAL	
Channel Configuration	16 channels, 2×8
Channel Pitch	2.54 mm
Breakout Interface	1.85 mm Female
Cable Assembly Length	XXXX mm, customizable
Mechanical Life	≥ 500 cycles
Operating Temperature	0 °C to +85 °C
RoHS	Compliant

MATERIALS & FINISHES

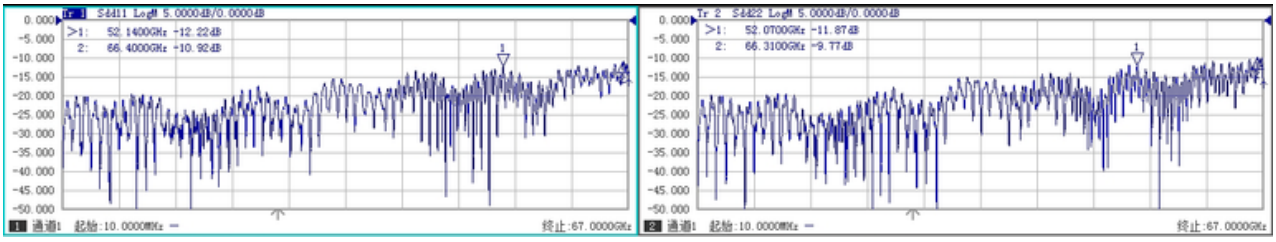
Multi-Channel Shell	**Aluminum, anodized**
Center Conductor	**Beryllium copper, gold plated**
Outer Conductor	**Beryllium copper, gold plated**
Insulator	**PEEK**

1.85 mm Center Contact	**Beryllium copper, gold plated**
1.85 mm Outer Conductor	**Stainless steel, passivated**
1.85 mm Insulator	**PEI**
Other Metallic Parts	**Stainless steel, passivated**

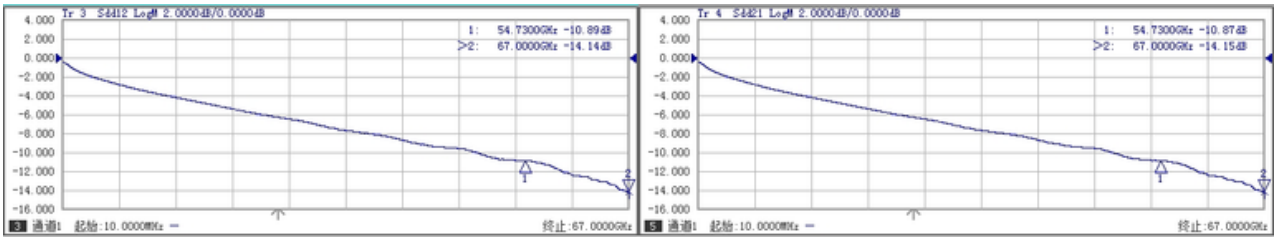
REPRESENTATIVE MEASURED PERFORMANCE

Mixed-Mode S-Parameter Measurement up to 67 GHz

Differential Return Loss **Sdd11 / Sdd22**



Differential Insertion Loss **Sdd21 / Sdd12**



TEST CONDITIONS	Mixed-Mode S-Parameters | 10 MHz to 67 GHz | Sdd11, Sdd22, Sdd21, Sdd12
NOTE	Representative data for the tested assembly. Performance varies with cable length and configuration. Individual test data available on request.

TYPICAL BOARD-LEVEL CONFIGURATION

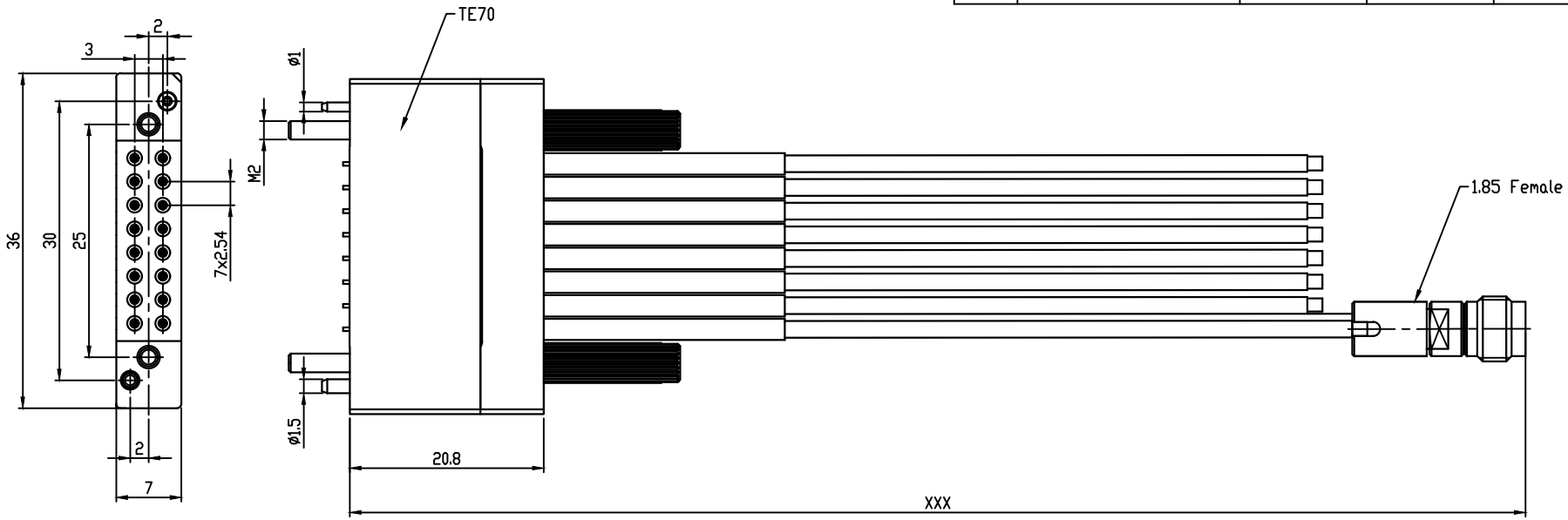


2×8 multi-channel interface connected to a board-level test fixture with individual 1.85 mm breakout connections for RF measurement instrumentation.

APPLICATIONS

- High-density RF and microwave testing
- Board-level interconnect evaluation
- Multi-channel test fixtures
- High-speed module and interconnect evaluation
- Millimeter-wave measurement systems
- Automated test equipment

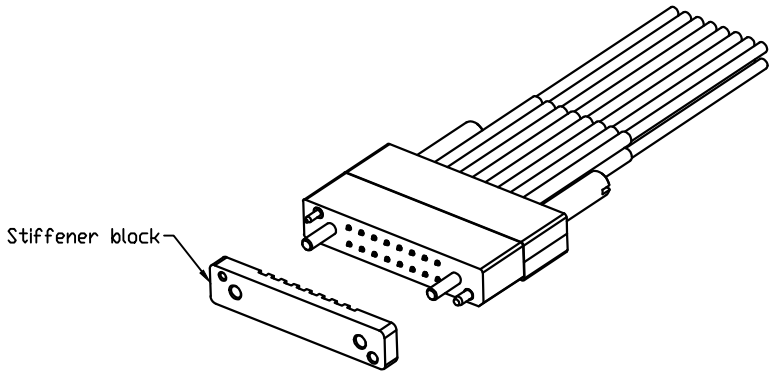
Rev.	Description	Drawn by	Approved by	Date
V1.0	First issues	S.J	T.F.L	2026.08.24



1. Electricals:
   - 1.1 Impedance: 50 Ω
   - 1.2 Frequency range: DC to 67 GHz
   - 1.3 Return loss: ⩾ 10 dB
   - 1.4 Insertion loss: ⩽ 11.5/1000*L+1.2 dB
   - 1.5 Test voltage: 300 Vrms
   - 1.6 Phase mating: ± 2 ps

2. Mechanical properties:
   - 2.1 Mechanical life: ⩾ 500 cycles

3. Working environment:
   - 3.1 Working temperature: 0 ℃ to +85 ℃



No.	Description	Material	Finish
TE70	Other parts	Stainless steel	Passivated
	Insulator	PEEK	NA
	Center contact	Beryllium copper	Gold
	Outer contact	Beryllium copper	Gold
	Shell	Aluminium	Anodized
1.85mm	Other parts	Stainless steel	Passivated
	Insulator	PEI	NA
	Center contact	Beryllium copper	Gold
	Outer contact	Stainless steel	Passivated

Dimension: MM

General tolerance
Unless Otherwise Specified
0 Places: ±0.2
1 Places: ±0.2
2 Places: ±0.2
3 Places:
4 Places:
Angles:

Weight: --

Projection:

Series: /

Cable: /

Product Spec.: Assembly Instr.:

Drawn:

Checked:

Approved:

CUSTOMER DRAWING

This drawing is a controlled document

Vinstronics

Title: Cable Assembly, 2x8 Channel

Part Number:

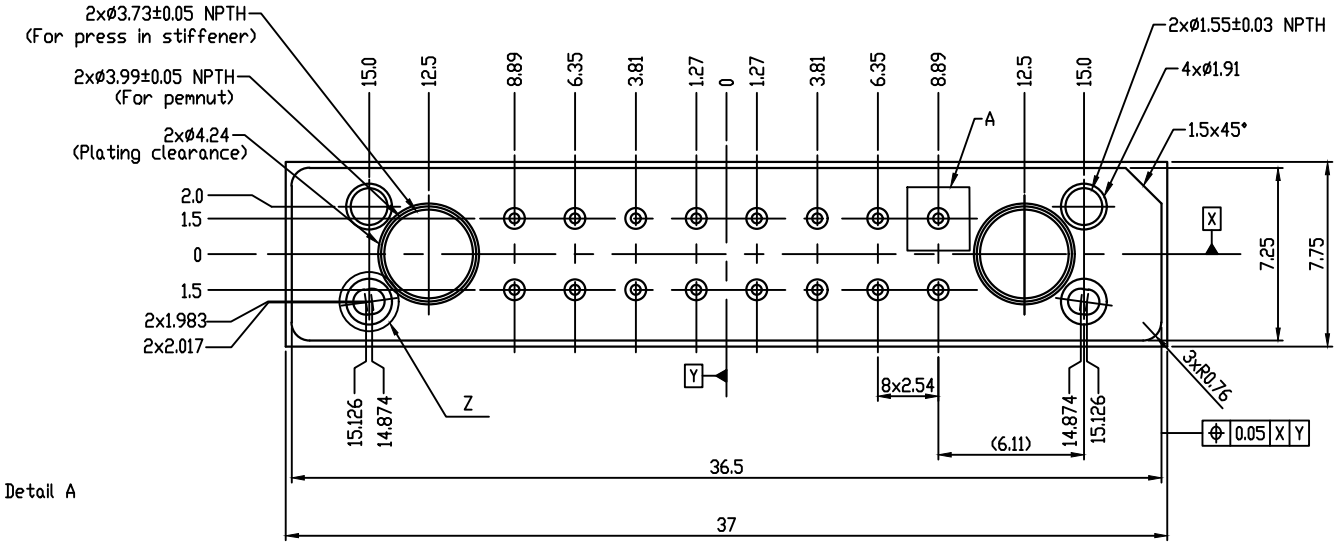
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Rev. V1.0

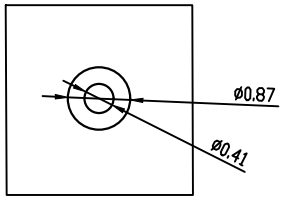
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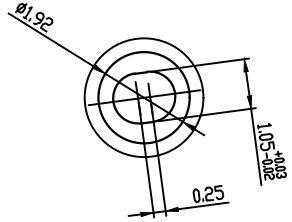
Recommended PCB layout



Detail A



Z detailedness



Dimension: MM	Series: /	Cable: /	Vinstronics
General tolerance Unless Otherwise Specified 0 Places: ±0.2 1 Places: ±0.2 2 Places: ±0.2 3 Places: 4 Places: Angles:	Product Spec:	Assembly Instr.:	
	Drawn:		Title: Cable Assembly, 2x8 Channel
	Checked:		
	Approved:		Part Number:
Weight: --	CUSTOMER DRAWING		Drawing Number: VST-L-TE70FF116C-XXX Rev. V1.0
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