67 GHz 1×4 High-Density Multi-Coax Cable Assembly

TW70 Multiport Interface to 4 × 1.85 mm Female Coaxial Ends

P/N: VST-L-TW70FF104-XXX

PRODUCT OVERVIEW

A four-channel (1×4) precision RF cable assembly that routes independent 50 Ω coaxial paths from a compact TW70 multiport interface to four 1.85 mm female terminations. Configurable cable lengths support high-density RF and millimeter-wave measurement interconnects.



DC–67 GHz	4 / 1×4	2.54 mm	1.85 mm
FREQUENCY	CHANNELS	CONTACT PITCH	FEMALE COAXIAL ENDS

KEY FEATURES

- Four independent 50 Ω coaxial paths
- Compact TW70 multiport interface
- Custom cable lengths available
- Phase matching: ±1 ps
- TW family: up to 32 channels
- TW Series: 224G PAM4 / 448G PAM6

TECHNICAL SPECIFICATIONS

ELECTRICAL	
Frequency range	DC–67 GHz
Nominal impedance	50 Ω / channel
Return loss	≥ 11 dB
Insertion loss (dB)	≤ 11.55 × L/1000 + 1.3
Phase matching	±1 ps
Channel arrangement	1×4 / 4 channels

MECHANICAL / ENVIRONMENTAL	
Multiport interface	TW70
Coaxial terminations	4 × 1.85 mm female
Contact pitch	2.54 mm
Min. bend radius	≥ 18 mm
Mating durability	≥ 500 cycles
Operating temp.	0 °C to +85 °C

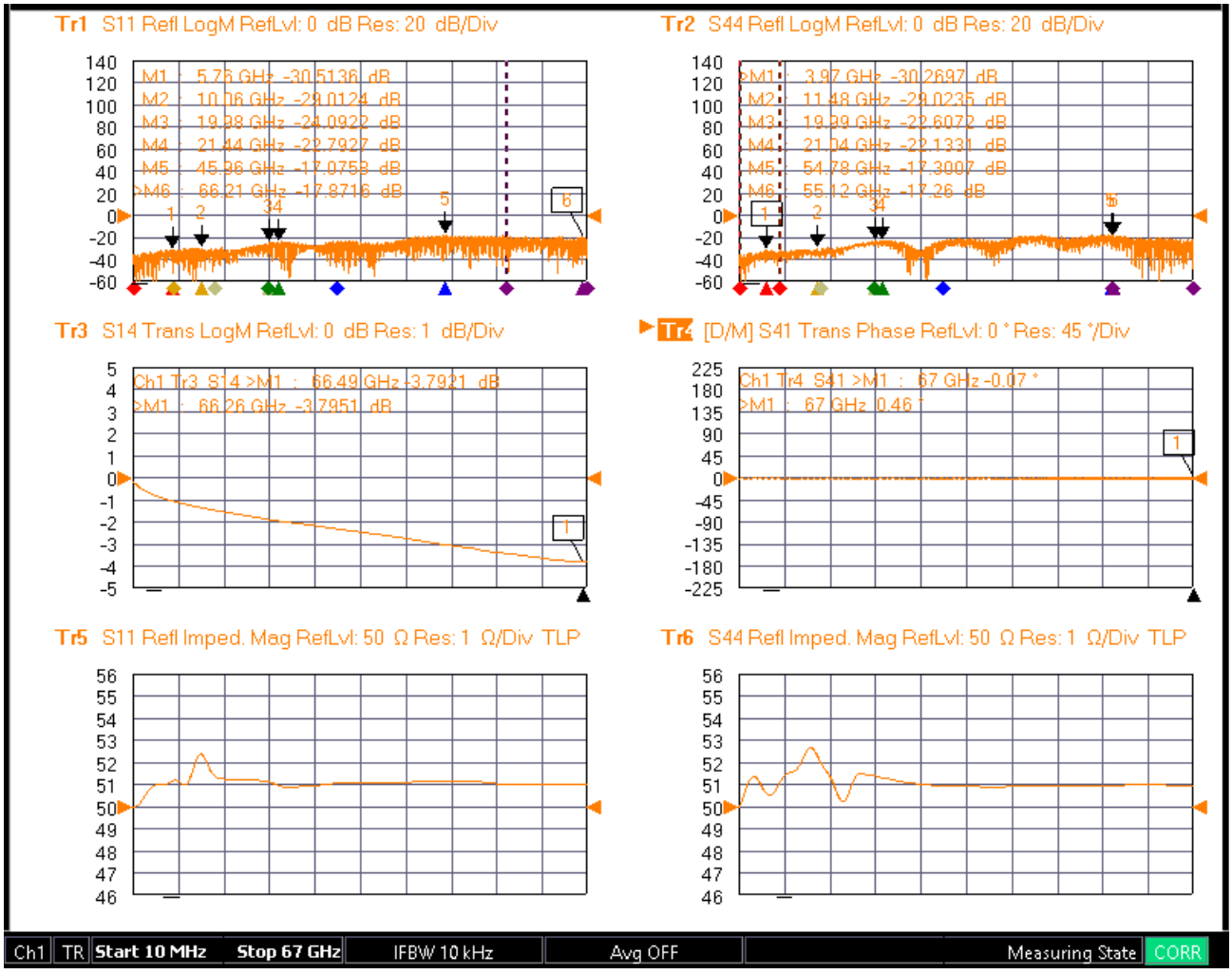
L = specified assembly length in mm.

CONSTRUCTION

Anodized aluminum TW70 housing · PTFE / PEEK insulators · Gold-plated beryllium-copper contacts

REPRESENTATIVE RF PERFORMANCE

TW70 Series | DC–67 GHz | Reference: VST-L-TW70MF116-300



PERFORMANCE OBSERVATIONS

- S14: Continuous transmission response across the measured band.
- S11 / S44: Frequency-dependent reflection behavior.
- Impedance: Responses remain near nominal 50 Ω with localized variations.

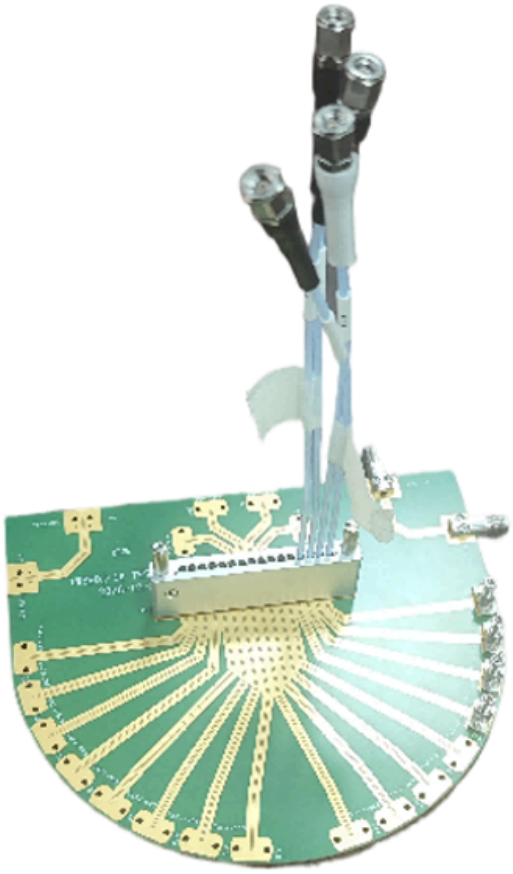
SELECTED REFERENCE READING

S14 TRANSMISSION	**≈ −3.79 dB at 66.5 GHz**	300 mm TW70 series reference

Full RF test report supplied with each delivered assembly.

TYPICAL BOARD-LEVEL CONFIGURATION

TW Series multiport interfaces with precision-coax breakout leads



Representative TW Series board-level test assembly

CONFIGURATION

Four independent 50 Ω RF paths are grouped in a compact TW70 1×4 interface and routed to 1.85 mm female coaxial ends for measurement and test interconnects.

APPLICATIONS

- Semiconductor & RFIC test fixtures
- RF / mmWave measurement & validation
- Automated test equipment (ATE)
- PCB, module & fixture interconnects

ORDERING & CONFIGURATION

For a configuration-specific quotation, specify:

CABLE LENGTH	120 / 250 / 300 mm or customer-specified length
CHANNEL MAPPING	Port numbering and channel assignment
MATING INTERFACE	TW70 1×4 and 4 × 1.85 mm female coaxial ends
RF REQUIREMENTS	Operating frequency, phase and loss objectives

Other TW Series channel counts, connector ends and assembly lengths available by configuration.

MECHANICAL OUTLINE

TW70FF104-XXX | 1×4 TW70 to 1.85 mm female | Dimensions in mm

