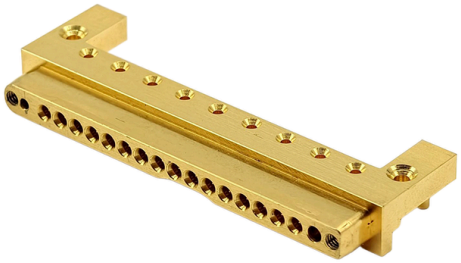
110 GHz 1×16 Right-Angle PCB Multi-Port Connector

Sixteen 50 Ω channels | 2.54 mm contact pitch

P/N: VST-TWS90K-16

PRODUCT OVERVIEW

A 16-channel right-angle RF connector providing independent 50 Ω signal paths through a compact 1×16 interface. Its 2.54 mm contact pitch and screw-retained construction support PCB-edge launch for RF/mmWave test fixtures and high-density interconnects.



DC–110 GHz	1×16	2.54 mm	Edge Mount
FREQUENCY	CHANNELS	CONTACT PITCH	PCB MOUNTING

KEY FEATURES

- Sixteen 50 Ω paths in a compact 1×16 interface
- DC–110 GHz operation for RF / mmWave test access
- Gold-plated BeCu contacts; PEI / PEEK insulators
- Right-angle launch for PCB-edge integration
- Screw-retained stiffener for board mounting
- ≥1,000 mating cycles for repeated connections

TECHNICAL SPECIFICATIONS

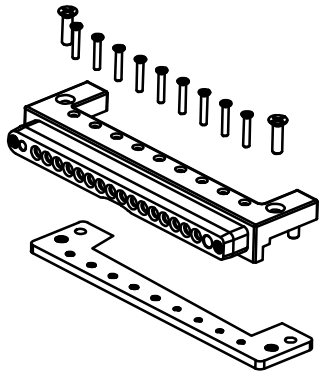
ELECTRICAL	
Frequency range	DC–110 GHz
Nominal impedance	50 Ω / channel
Return loss, DC–70 GHz	≥ 15 dB
Return loss, 70–110 GHz	≥ 10 dB
Insertion loss	≤ 0.1√f dB[1]
Insulation resistance	≥ 5,000 MΩ
Working voltage	500 Vrms

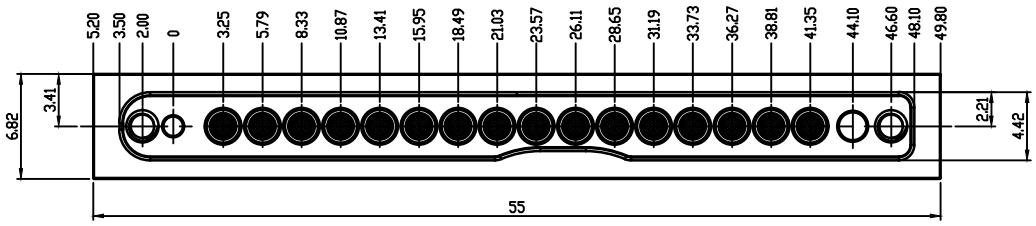
MECHANICAL / ENVIRONMENTAL	
Channel arrangement	1×16 / 16 channels
Contact pitch	2.54 mm
Board mounting	Edge mounting
Mating durability	≥ 1,000 cycles
Mounting fastener	M1 × 9 / M1.6 × 2
Mounting torque (kgf·cm)	0.6 (M1) / 1.4 (M1.6)
Working temperature	−40 °C to +120 °C

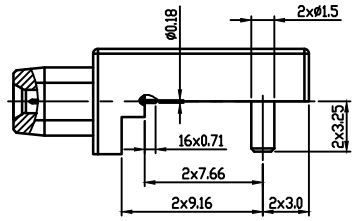
[1] f = frequency in GHz. RoHS compliant. Specifications per TWS90K-16 drawing, rev. V2.0.

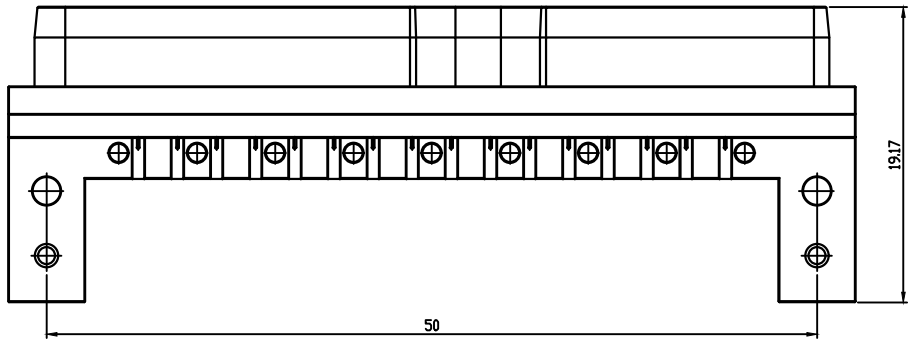
CONSTRUCTION Gold-plated brass body · Gold-plated BeCu contacts · PEI / PEEK insulators · Passivated stainless steel

Rev.	Description	Drawn by	Approved by	Date
V1.0	First issues	T.FL	C.G	2024.12.24
V2.0	Re-release	T.FL	C.G	2025.06.03





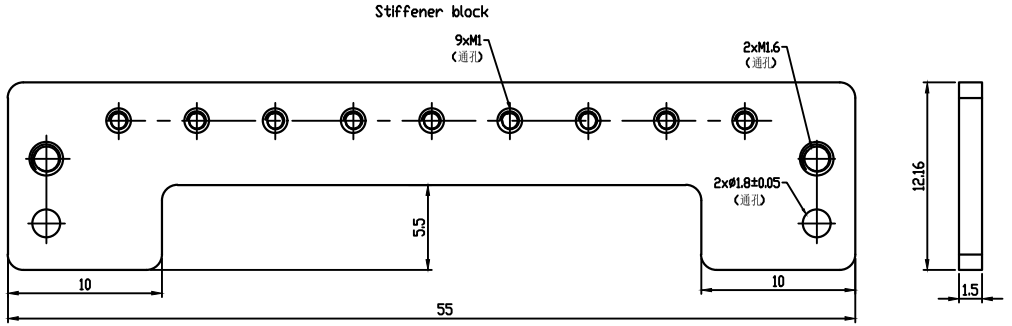




1. Electricals data
   - 1.1 Impedance: 50 Ω
   - 1.2 Frequency range: DC to 110 GHz
   - 1.3 Return loss: ⩾ 15 dB, DC to 70 GHz
     ⩾ 10 dB, 70 GHz to 110 GHz
   - 1.4 Insertion loss: ⩽ 0.1 dB x sqrt(F(F in GHz))
   - 1.5 Insulator resistance: ⩾ 5000 MΩ
   - 1.6 Working voltage: 500 Vrms

2. Mechanical data
   - 2.1 Mechanical life: ⩾ 1000 cycles
   - 2.2 Recommended torque 0.6kgf.cm (M1)
     1.4kgf.cm (M1.6)
   - 2.3 Board mounting type: Edge Mounting

3. Environment data
   - 3.1 Working temperature: -40 ℃ to +120 ℃
   - 3.2 RoHS: Compliant



No.	Description	Material	Finish
4	Other parts	Stainless steel	Passivated
3	Insulator	PEI&PEEK	NA
2	Center contact	Beryllium Copper	Gold
1	Body	Brass	Gold

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: Right Angle Plug 1x16, For Board Launch
	Checked:		
	Approved:		Part Number:
Weight: --	CUSTOMER DRAWING		Drawing Number: TWS90K-16 Rev. V2.0
Projection:	This drawing is a controlled document		Scale: 10:1 Remark: Page: 1/2