

1.00mm Armored Flex RF Cable

TCA100A050 is 50cm high-frequency coaxial cable designed for precision signal transmission up to 110 GHz. With triple shield and spring-armored, it features low loss, excellent shielding, and stable phase performance. The spring-armored shield also makes such cable flexible and maintains excellent performance under bending. Cable length can be customized.



Features

- Low Loss
- Low VSWR
- Bend-resistant
- Vibration-resistant

Applications

- RF Component Testing
- RF System Integration
- Laboratory Testing
- Chamber Testing

Mechanical Properties

Parameter	Value
Length	50 cm
Dynamic Bending Radius	39 mm
Static Bending Radius	19.5 mm
Mechanical Phase Stability	±10°
Amplitude Stability	±0.05 dB
Weight	0.033 kg/m

TCA100A050

TIMWAVE

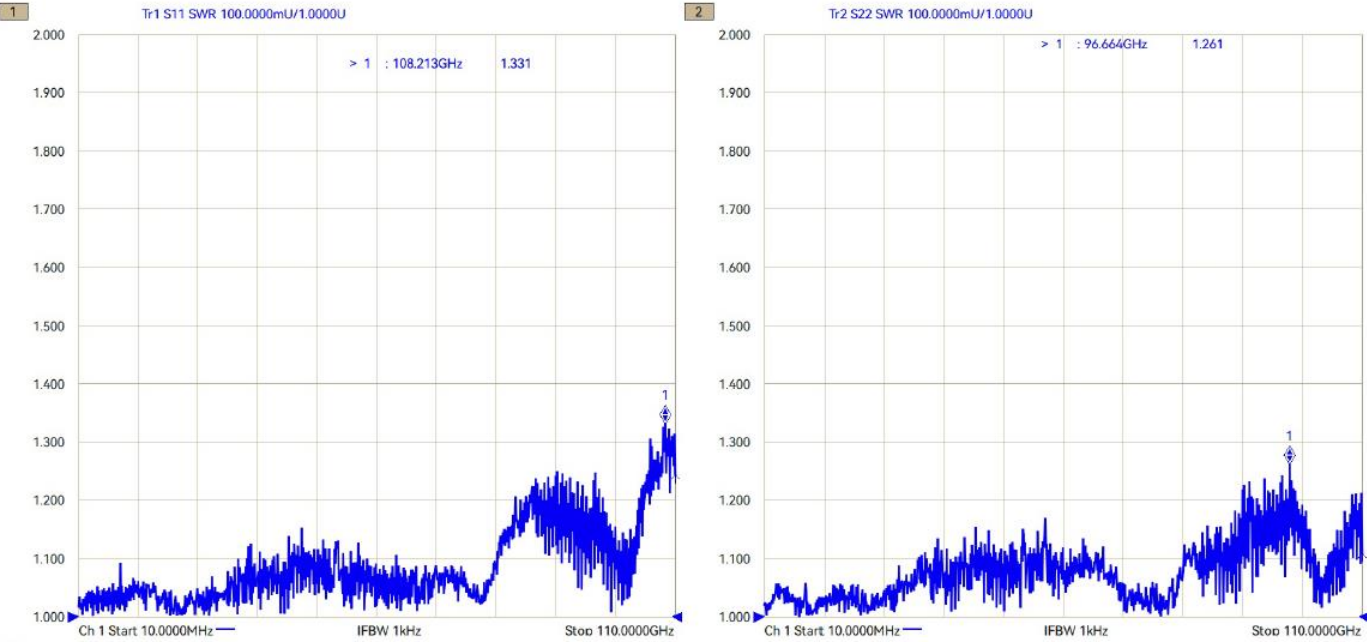
Specification

Parameter	Frequency (GHz)	Min.	Typ.	Max	Units
Insertion Loss	DC – 2	0.6	0.8	0.9	dB
	2 – 6	1.4	1.5	1.6	
	6 – 10	1.6	1.9	2.1	
	10 – 18	2.5	2.7	2.9	
	18 - 26.5	3.0	3.5	3.9	
	26.5 - 40	4.0	4.2	4.4	
	40 – 67	4.6	5.0	5.2	
	67 – 110	5.5	7.0	7.2	
Return Loss	DC – 2		23		dB
	2 – 6		23		
	6 – 10		23		
	10 – 18		23		
	18 – 26.5		23		
	26.5 – 40		23		
	40 – 67		20		
	67 – 110		15		
Flexing Durability		100,000 times			
Temperature		-55°C to +125°C			

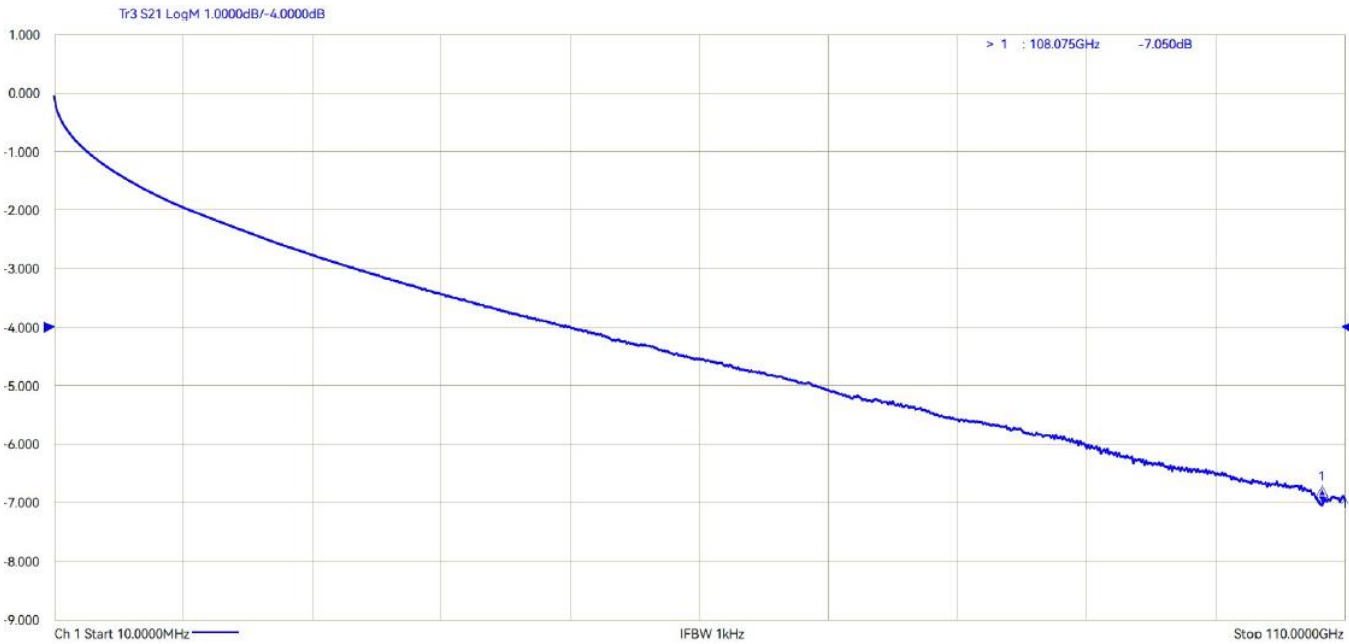
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Typical Measured Data

VSWR

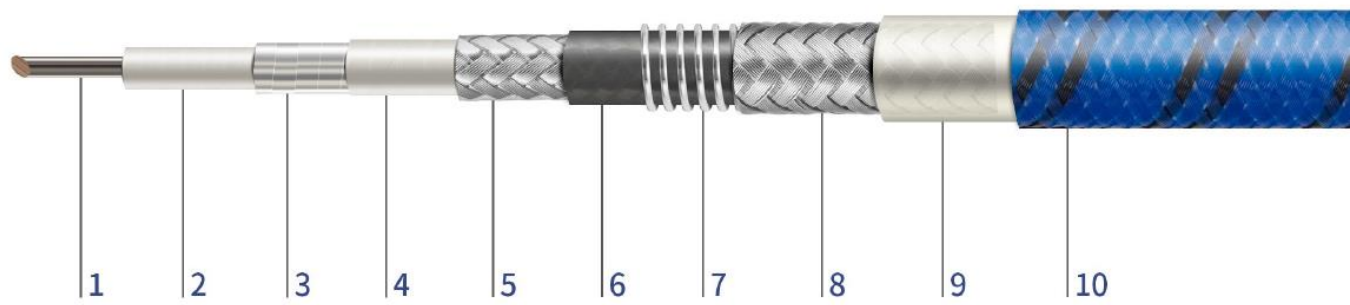


Insertion Loss



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Cable Construction & Materials



Section	Component	Diameter (mm)	Material
1–6	Cable	1.85	FEP
7–8	Shielding Layer	2.70	Silver-plated Copper
9–10	Outer Jacket	3.90	PTFE

Information:

For sales and support, please contact: info@timave.com

TIMWAVE TECHNOLOGIES COMPANY LIMITED

Asia Office: B1, No. 92, Sec. 2 An-He Rd.

Taipei 106, Taiwan