

TC-055A ϕ 8.4 Armored Cable

Series Number
TC-055A
Armored Cable Low loss/phase stability



Armored cable reinforced with low-loss, highest grade TC-055 cable covered with stainless steel tubing. Stainless steel tube protects the cable from external pressure and ensures long life. For sites with repetitive bending and routing. Use in constant temperature tanks. Use in outdoor fields, etc.

Mechanical Characteristics

Outer Diameter/Coating	8.4mm	Stainless Steel Tubing
Inner cable outer diameter	5.46mm	FEP Transparency
Center Conductor	1.42mm	Silver plated copper, Single
insulator	4.19mm	Microporous PTFE
Outer Conductor1	4.29mm	Silver plated copper
Outer Conductor2	4.5mm	Aluminum/Polyimide Tape
Outer Conductor3	4.9mm	Silver plated copper, Braided
Operating temperature	-35°C~+135°C (Typ. -65°C~+200°C)	
Bending radius (min.)	Inner R65mm	
Mass	170g/m	

Electrical Characteristics

Impedance	50 Ω
Withstand voltage	AC2000V / minute
Allowable power (typ)	1230W@1GHz / 480W@6GHz
Shield Characteristics	>110dB
Wavelength shortening rate	77.3%
Frequency(Max.)	26.5GHz
Insertion Loss (typ)	0.25dB/m(@1GHz) / 0.55dB/m(@5GHz)
VSWR (typ)	1.10 (SMA)、1.20 (N)、1.10(3.5mm)
Phase vs Bending (typ)	0.2° @6GHz, 0.4° @10GHz(Inner 20mm,90-degree bend)
Phase vs Temperature (typ)	1500PPM(Max.) (-35°C~+135°C)

Applicable Connectors and Models

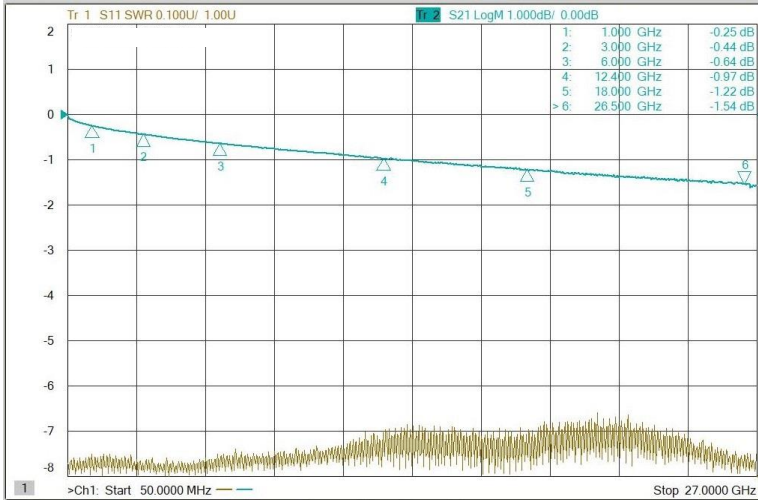
	TC	-	055A	-	SP	-	SP	-	□□□□	-	△△
	①		②		③		④		⑤		⑥
			Cable Type		Connector1		Connector2		Length		Option
									⑤ L (mm)		
					③						④
①	TC	RoHS compliant		*Non-RoHS requests are negotiable.							
②	055A	Cable Standard									
③ ④	SP	SMA(P)	~18GHz (~26.5G ※)								
	SJ	SMA(J)	~18GHz (~26.5G ※)								
	NPH	N(P)	~18GHz								
	3.5P	3.5mm(P)	~26.5GHz								
	3.5J	3.5mm(J)	~26.5GHz								
⑤	□□□□	Cable length (mm)									
⑥	No entry	Standard Specification									
	26.5G	Frequency ~26.5GHz ※	Only SMA(P) and SMA(J)								

In the case of standard specifications, ⑥ is not required to be filled in.

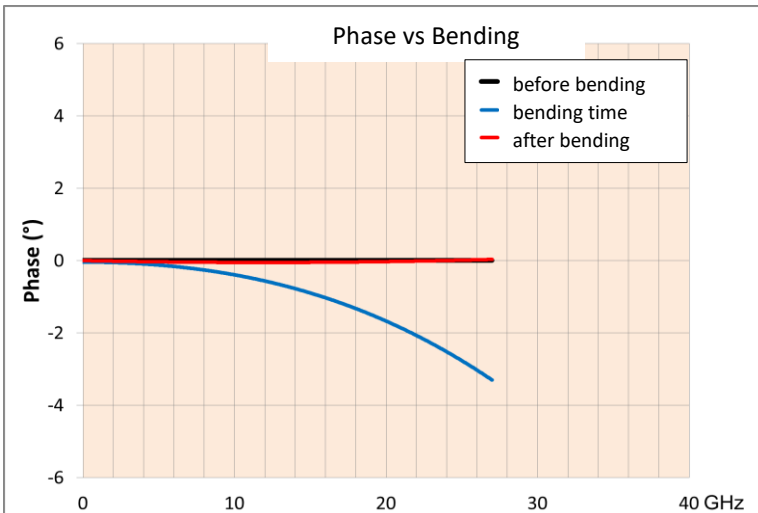
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Measured data

Model : TC-055A-SP-SP-1000-26.5G
 (SMAP-SMAP L=1m ~26.5GHz)



GHz	(Typ)	(Typ)
	I.L.(dB)	VSWR(U)
1	-0.25	1.04
2	-0.35	1.02
3	-0.43	1.06
4	-0.49	1.01
5	-0.55	1.03
6	-0.60	1.02
7	-0.65	1.08
8	-0.71	1.01
9	-0.75	1.07
10	-0.80	1.04
11	-0.83	1.11
12	-0.89	1.09
13	-0.91	1.12
14	-0.97	1.05
15	-1.00	1.05
16	-1.03	1.08
17	-1.08	1.03
18	-1.12	1.07
19	-1.14	1.04
20	-1.20	1.06
21	-1.24	1.08
22	-1.29	1.10
23	-1.31	1.05
24	-1.36	1.10
25	-1.39	1.03
26	-1.43	1.10
26.5	-1.46	1.03



These are reference values for phase change with a bending radius of 20 mm and a 90-degree bend.

Actual Applications

- Cables for measurement tests in thermostatic chambers.
- Connection cables for elevated antennas outdoors.
- EMC measurements.

Custom Cases

- We can also manufacture products with performance, connectors, cable lengths, etc. other than the standard specifications.
- Armored tubes can also be covered with resin.

The data, etc. shown in the catalog are representative values and are not guaranteed.