

TC-065A ϕ 6.1 Armored Cable

Series Number
TC-065A
Armored Cable ϕ 6.1



Armored cable reinforced with flexible TC-065 cable for measurement covered with stainless steel tubing.
 Thinner than TC-055A for applications where handling is important.
 ~40 GHz (2.92mm connector)
 Sites with repeated bending and routing. Use in thermostatic chambers. Use in outdoor fields, etc.

Mechanical Characteristics

Outer Diameter/Coating	6.1mm	Stainless Steel Tubing
Inner cable outer diameter	3.3mm	FEP Light blue
Center Conductor	0.70mm	Silver plated copper wire, Single
insulator	2.15mm	Microporous PTFE
Outer Conductor1	-	Silver plated copper tape
Outer Conductor2	-	PPS resin tape
Outer Conductor3	2.80mm	Silver-plated soft copper wire braid
Operating temperature	-40°C~+125°C (Typ.-65°C~+125°C)	
Bending radius (min.)	Inner R50mm	
Mass	93g/m	

Electrical Characteristics

Impedance	50 Ω
Insulation resistance (20°C)	1000M Ω · km (Min.)
Withstand voltage	AC2000V / minute
Shield Characteristics	>120dB
Frequency(Max.)	40GHz
Insertion Loss (typ)	0.43B/m(@1GHz) / 1.02dB/m(@5GHz)
VSWR (typ)	1.10(SMA)、1.20(K)、1.25(N)
Phase vs Bending (typ)	0.4° @6GHz, 0.6° @10GHz (Inner R20mm, 90-degree bend)
Phase vs Temperature (typ)	1500PPM(Max.) (-35°C~+125°C)

Applicable Connectors and Models

	TC	-	065A	-	SP	-	SJ	-	□□□□	-	△△
	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	065A	Cable Type									
③ ④	SP	SMA(P)	~18GHz (~26.5G ※)								
	SJ	SMA(J)	~18GHz (~26.5G ※)								
	SPL	SMAL(P)	~18GHz								
	2.92P	2.92mm(P)	~40GHz								
	2.92J	2.92mm(J)	~40GHz								
	NP	N(P)	~12.4GHz								
	Consultation	N(J)	Consultation								
⑤	□□□□	Cable length (mm)									
⑥	No entry	Standard Specification									
	26.5G	Frequency ~26.5GHz ※	Only SMA(P) and SMA(J)								

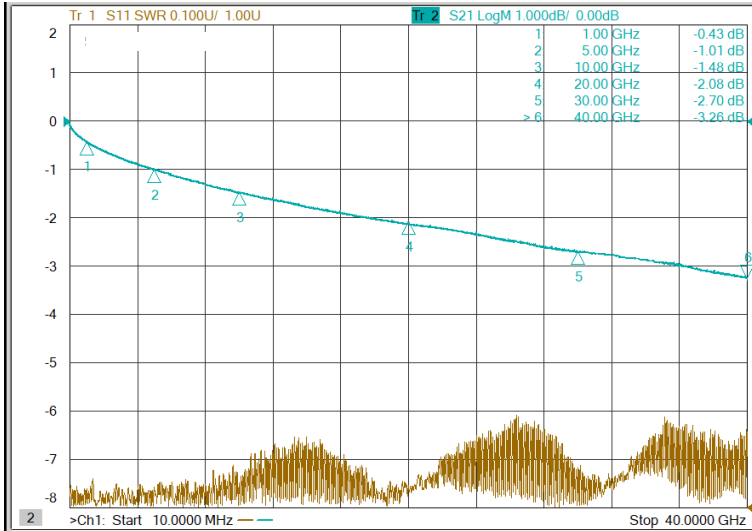
In the case of standard specifications, ⑥ is not required to be filled in.

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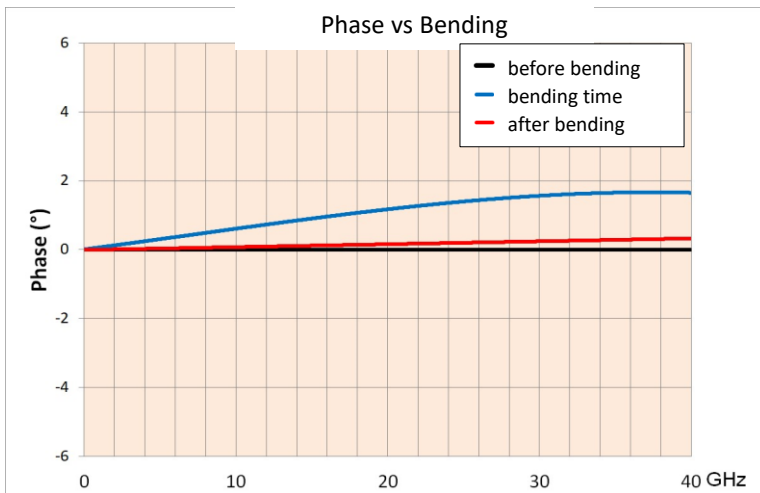
Measured data

Model : TC-065A-2.92P-2.92P-1000

(2.92mm(P)-2.92mm(P) L=1m ~40GHz)



GHz	I.L.(dB) (Typ)	VSWR(U) (Typ)
1	-0.43	1.04
2	-0.62	1.01
3	-0.76	1.01
4	-0.90	1.03
5	-1.02	1.04
6	-1.11	1.04
7	-1.24	1.04
8	-1.33	1.04
9	-1.41	1.00
10	-1.49	1.05
11	-1.57	1.02
12	-1.60	1.11
13	-1.70	1.07
14	-1.79	1.11
15	-1.85	1.08
16	-1.85	1.06
17	-1.99	1.07
18	-2.04	1.05
19	-2.09	1.02
20	-2.09	1.05
21	-2.19	1.05
22	-2.24	1.07
23	-2.30	1.11
24	-2.29	1.10
25	-2.43	1.10
26	-2.52	1.15
27	-2.51	1.09
28	-2.65	1.15
29	-2.70	1.05
30	-2.70	1.07
31	-2.73	1.07
32	-2.70	1.04
33	-2.78	1.08
34	-2.82	1.12
35	-2.91	1.14
36	-3.00	1.09
37	-3.08	1.13
38	-3.15	1.06
39	-3.22	1.09
40	-3.27	1.11



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.

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