

Base Station Feeder Cable

Product Description



LINKTREND® 50 ohms corrugated copper tube coaxial cable is made on advanced physical foaming insulation production line and argon arc welding, corrugating and slotting production line which are imported respectively from Austria and USA. Its operation is strictly in compliance with ISO 9001 quality assurance system.

ROYAL® 50 ohms corrugated copper tube coaxial cable is mainly used for the connection of transmitter, receiver and antenna and also connection between wireless communication equipments or other low loss and VSWR signal transmission at high frequency application. The cables is featured with low attenuation, low VSWR, small coefficient of temperature, strong corrosion resistance, good longitudinally water seal and high power capacity.

50 Ω FEEDER CABLE

Construction

Item		1/4"s	1/4"	3/8"s	3/8"	1/2"s	1/2"	7/8"s	7/8"	7/8"	1-1/4"	1-5/8"
		HCAHY-50 -5	HCAA-50 -6	HCAHY-50 -7	HCAA-50 -8	HCAHY-50 -9	HCAA-50 -12	HHTAY-50 -21	HCTAY-50 -22	Low Loss HCTAY-50 -23	HCTAY-50 -32	HHTAY-50 -42
Inner Conductor	Material	CCA	CCA	CCA	CCA	CCA	CCA	Helically Corrugated Copper Tube	Smooth Copper Tube	Smooth Copper Tube	Smooth Copper Tube	Helically Corrugated Copper Tube
	Diameter (mm)	Φ 1.9	Φ 2.6	Φ 2.6	Φ 3.10	Φ 3.6	Φ 4.80	Φ 9.40	Φ 9.00	Φ 9.45	Φ 13.1	Φ 17.3
Dielectric	Material	Foamed PE	Foamed PE	Foamed PE	Foamed PE	Foamed PE	Foamed PE	Foamed PE	Foamed PE	Foamed PE	Foamed PE	Foamed PE
	Diameter (mm)	Φ 5.0	Φ 6.5	Φ 7.0	Φ 8.0	Φ 9.4	Φ 12.4	Φ 22.4	Φ 22.4	Φ 23.2	Φ 32.1	Φ 42.0
Outer Conductor	Material	Helically Corrugated Copper Tube	Annularly Corrugated Copper Tube	Helically Corrugated Copper Tube	Annularly Corrugated Copper Tube	Helically Corrugated Copper Tube	Annularly Corrugated Copper Tube	Annularly Corrugated Copper Tube	Annularly Corrugated Copper Tube	Annularly Corrugated Copper Tube	Annularly Corrugated Copper Tube	Annularly Corrugated Copper Tube
	Diameter (mm)	Φ 6.40	Φ 7.70	Φ 9.00	Φ 9.50	Φ 11.90	Φ 13.90	Φ 24.90	Φ 24.90	Φ 25.40	Φ 35.80	Φ 46.5
Jacket	Material	PE or LSZH										
	Diameter (mm)	Φ 7.60	Φ 9.2	Φ 10.6	Φ 10.9	Φ 13.6	Φ 15.5	Φ 27.5	Φ 27.5	Φ 27.8	Φ 38.80	Φ 50.0

Mechanical Properties

	1/4"s	1/4"	3/8"s	3/8"	1/2"s	1/2"	7/8"s	7/8"	7/8"	1-1/4"	1-5/8"
	HCAHY-50 -5	HCAA-50 -6	HCAHY-50 -7	HCAA-50 -8	HCAHY-50 -9	HCAA-50 -12	HHTAY-50 -21	HCTAY-50 -22	Low Loss HCTAY-50 -23	HCTAY-50 -32	HHTAY-50 -42
Max. tensile strength (N)	680	910	950	1100	800	1130	1020	1500	1700	2500	3000
Flat plate crush resistance (N/mm)	18	14	18	20	19	20	14	14	14	24	20
Minimum bend (single) (mm)	12	40	15	30	17	80	90	140	150	200	280

Minimum bend (repeated) (mm)		25	80	50	100	55	125	130	250	275	380	500
Operation temperature range (°C)	PE	-40~+70										
	LSZH	-25~+70										
Installation temperature(°C)		-20~+60										
Cable weight kg/km	PE	70	85	125	130	170	210	420	480	540	920	1340
	LSZH	85	95	138	145	190	235	470	535	610	1000	1500

Electrical Properties

		1/4"s HCAHY -50 -5	1/4" HCAAY- 50 -6	3/8"s HCAHY- 50 -7	3/8" HCAAY- 50 -8	1/2"s HCAHY- 50 -9	1/2" HCAAY- 50 -12	7/8"s HHTAY- 50 -21	7/8" HCTAY- 50 -22	7/8" Low Loss HCTAY-50 -23	1-1/4" HCTAY- 50 -32	1-5/8" HHTAY- 50 -42
Characteristic impedance(Ω)		50±1										
Velocity of propagation(%)		83	86	82	88	82	88	88	88	88	88	88
Capacitance(pF/m)		80	77	82	76	83	76	76	76	76	76	76
Max.opertation frequency(GHz)		20.4	18.6	13.4	13	10.2	8.8	5	5	4.9	3.3	2.7
Peak power rating(KW)		8.2	6	13.5	15.6	19	58	90	91	99.5	200	290
Insulation dielectric strength (DC.V)		2000	2000	2500	2500	2500	6000	6000	10000	10000	10000	15000
Max. Attenuation (20°C) dB/ 100m	Frequenc y (MHz)	1/4"s HCAHY -50 -5	1/4" HCAAY- 50 -6	3/8"s HCAHY- 50 -7	3/8" HCAAY- 50 -8	1/2"s HCAHY- 50 -9	1/2" HCAAY- 50 -12	7/8"s HHTAY- 50 -21	7/8" HCTAY- 50 -22	7/8" Low Loss HCTAY-50 -23	1-1/4" HCTAY- 50 -32	1-5/8" HHTAY- 50 -42
	50	4.58	3.01	3.06	2.59	2.35	1.58	0.96	0.86	0.82	0.58	0.46
	150	8.07	5.50	5.40	4.58	4.21	2.80	1.69	1.54	1.45	1.03	0.83
	450	14.22	9.88	9.70	8.16	7.59	5.06	3.03	2.77	2.6	1.87	1.53
	800	19.22	13.55	13.29	11.13	10.40	6.95	4.14	3.83	3.57	2.59	2.13
	900	20.45	14.47	14.19	11.86	10.60	7.43	4.42	4.08	3.81	2.80	2.3
	1000	21.62	15.37	15.12	12.57	11.50	7.89	4.70	4.33	4.06	2.94	2.43
	1500	26.84	19.31	18.94	15.72	14.35	9.94	5.87	5.47	5.08	3.73	3.11
	1800	29.6	21.45	21.03	17.41	16.00	11.05	6.51	6.08	5.65	4.16	3.47
	2000	31.33	22.80	22.35	18.48	17.20	11.76	6.92	6.47	6.00	4.43	3.71
	2200	32.99	24.10	23.63	19.51	18.20	12.44	7.15	6.85	6.34	4.69	3.95
2400	34.59	25.37	24.86	20.50	19.18	13.10	7.69	7.20	6.67	4.95	4.19	
3000	39.08	28.95	28.37	23.30	22.40	14.93	8.76	8.24	7.61	5.68	4.31	
Average power (Kw)	Frequenc y (MHz)	1/4"s HCAHY -50 -5	1/4" HCAAY-5 0 -6	3/8"s HCAHY- 50 -7	3/8" HCAAY-5 0 -8	1/2"s HCAHY- 50 -9	1/2" HCAAY-5 0 -12	7/8"s HHTAY-5 0 -21	7/8" HCTAY-5 0 -22	7/8" Low Loss HCTAY-50 -23	1-1/4" HCTAY-5 0 -32	1-5/8" HHTAY-5 0 -42

	50	1.76	2.53	3.06	3.03	4.42	4.98	9.47	10.8	10.8	16.9	23.6
	150	1.0	1.42	1.74	1.72	2.49	2.79	5.36	6.17	6.14	6.17	13.08
	450	0.537	0.80	0.975	0.97	1.38	1.56	2.99	3.34	3.44	3.34	6.95
	800	0.419	0.60	0.715	0.71	1.01	1.17	3.81	2.48	2.53	3.78	5.15
	900	0.39	0.56	0.642	0.67	0.898	1.05	1.96	2.3	2.4	3.5	4.85
	1000	0.37	0.52	0.634	0.63	0.889	1.02	1.94	2.20	2.24	2.20	4.31
	1500	0.299	0.41	0.507	0.50	0.71	0.83	1.54	1.74	1.79	1.62	3.54
	1800	0.271	0.38	0.457	0.46	0.634	0.74	1.39	1.58	1.60	1.58	2.98
	2000	0.256	0.36	0.431	0.43	0.597	0.70	1.31	1.49	1.52	1.49	2.76
	2200	0.243	0.34	0.409	0.41	0.564	0.673	1.24	1.4	1.5	1.40	2.70
	2400	0.231	0.32	0.387	0.39	0.534	0.651	1.18	1.32	1.31	1.30	2.58
	3000	0.204	0.29	0.342	0.34	0.469	0.55	1.04	1.16	1.21	1.16	2.37
Max.VSWR	400-500	≤ 1.15										
	800-1000	≤ 1.15										
	1700-2200	≤ 1.15										
3rd order intermodulation dBc	≥ 155											

Attenuation: VSWR= 1.0, Ambient temperature= 20°C;

Average power: VSWR=1.0, Ambient temperature=40°C, Inner conductor temperature= 100°C;