

RF CABLE SPECIFICATIONS



CABLE TYPE		50Ω CABLES							
		0.81	1.13	RG 178	CTB-2650F-01	RG 174	RG 316	RG 316 DS	RG 58
Impedance	Ω	50 ± 3	50 ± 2	50 ± 2	50 ± 2	50 ± 5	50 ± 2	50 ± 3	50 ± 3
Attenuation (dB/m)	100 MHz	1.0	0.6	0.5	0.68	0.4	0.3	1.4 @ 2 GHz	0.2
	1 GHz	3.1	1.9	1.7	2.37	1.4	1.25	1.6 @ 3 GHz	0.8
	6 GHz	8.6	4.9	5.9	6.53	4.4	4.25	2.2 @ 5 GHz	5.4
Dielectric Constant (dk)	-----	2.0	2.0	2.1	1.56	2.3	2.1	2.1	2.3
Dielectric Strength	VAC	1000	500	1000	-----	500	1200	-----	1400
Propagation Delay	nS/m	4.70	4.70	4.83	4.17	5.06	4.83	-----	5.05
Current Rating	Amps	1.2	2.1	3	3	5	5	-----	-----
Capacitance	pF/m	100	95	96	85.6	101	96	95.8	102

Center Conductor	Material	Silver plated Copper	Silver plated Copper	Silver plated Copper Clad Steel	Silver plated Copper	Bare Copper	Silver and Copper plated Steel	Silver plated Copper Clad Steel	Tinned Copper
	AWG	36	32	30	26	26	26	26	20
	Stranding (No./mm)	7/0.05	7/0.076	7/0.10	19/0.10	7/0.16	7/0.17	7	19/0.018
	Diameter (mm)	0.15	0.23	0.31	0.48	0.48	0.51	0.53	0.80
	Max Resistance (Ω/m)	1.40	0.60	0.34	0.12	0.14	0.13	-----	-----
Dielectric	Material	FEP	FEP	PTFE	Foamed FEP	KLPE	PTFE	FEP	Solid Polyethylene
	Diameter (mm)	0.40	0.68	0.84	1.29	1.52	1.52	1.53	3.00
Shield	Material	Silver plated Copper	Tinned Copper	Silver plated Copper	Silver plated Copper	Tinned Copper	Silver plated Copper	Silver plated Copper	Tinned Copper
	Diameter (mm)	0.65	0.89	1.37	1.5	2.57	1.73	2.38	3.81
Jacket	Material	PFA	FEP	FEP	FEP	PVC	FEP	FEP	PVC
	Diameter (mm)	0.81	1.13	1.80	1.80	2.79	2.53	2.90	5.00
	Temp Rating	-40°C to +90°C	-40°C to +90°C	-50°C to +165°C	-40°C to +200°C	-20°C to +80°C	-55°C to +165°C	-----	-50°C to +90°C
	Color	Gray	Gray	Brown	Blue	Black	Brown	Brown	Black

Bend Radius	Min	5 mm	6.8 mm	10.2 mm	3.175 mm	25.4 mm	12.7 mm	12.8 mm	48.3 mm
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Termination Options		MHF1, MHF3, SMA	MHF1, SMA	MMCX, MCX, SMA, SMB, BNC, TNC, N Type	MMCX, MMCXV, MCX, SMA, SMB, BNC, TNC, N Type	MMCX, MCX, SMA, BNC, TNC	SMA, TNC, N Type		
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Samtec Series		MH081	MH113	RF178	IJ5C	RF174	RF316, IJ5C, IJ5H, GRF1-C, GRF1H-C, ACP, ACR	RS316	RF058
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50Ω MICROWAVE CABLES					75Ω CABLES				100Ω CABLES
MWC-2550-01	MWC-2350-01	RG 047 (.047")	RG 405 (.086")	RG 402 (.141")	RG 179	BELDEN 1855A	BELDEN 1694A	RG 6	TPS-28100-RF
50 ± 1	50 ± 1	50 ± 1	50 ± 2	50 ± 2	75 ± 3	75 ± 3	75 ± 3	75 ± 3	100 ± 5
0.65 @ 1 GHz	0.17	0.80 @ 0.5 GHz	0.72 @ 1 GHz	0.40 @ 1 GHz	0.3	0.12	0.07	0.07	-----
1.37 @ 4 GHz	0.7	1.15	2.59 @ 4 GHz	1.04 @ 4 GHz	0.8	0.37	0.21	0.21	-----
3.36 @ 20 GHz	1.7	2.62 @ 4 GHz	4.26 @ 20 GHz	2.30 @ 20 GHz	3.6	0.97	0.59	0.59	-----
2.1	2.15	2.1	2.04	1.99	1.8	1.42	1.44	1.44	2.1
-----	300	-----	1000	1000	1200	300	300	2000	-----
4.76	4.72	-----	4.79	4.79	4.83	4.12	4.06	4.03	-----
5.3	7.4	-----	-----	-----	3	5	-----	-----	-----
96.8	95.45	95.14	104.97	98.072	64	55.7	53.14	53.14	38

Silver plated Copper	Silver plated Copper	Silver plated Copper	Silver plated Copper Clad Steel	Silver plated Copper Clad Steel	Silver plated Copper	Bare Copper	Bare Copper	Bare Copper	Silver plated Copper
25	23	46	24	19	30	23	18	18	28
1/0.45	1/0.57	1/0.29	1/0.51	1/0.92	7/0.10	1/0.58	1/1.02	1/1.02	2/0.85
0.45	0.57	0.29	0.51	0.92	0.30	0.58	1.02	1.02	1.97
0.105	0.071	-----	0.67	0.02	0.34	0.066	0.021	0.021	0.029
Solid FEP	Solid FEP	FEP	PTFE	PTFE	PTFE	FHDPE	FHDPE	FHDPE	FEP
1.46	1.85	0.92	1.68	2.98	1.58	2.59	4.57	4.57	1.97
1. Flat Silver plated Copper 2. Silver plated Copper Braid	1. Flat Silver plated Copper 2. Silver plated Copper Braid	1. Flat Silver plated Copper 2. Silver plated Copper Braid	Tinned Copper	Tinned Copper	Silver plated Copper	1. Al Foil-Polyester Tape-Al Foil 2. Tinned Copper	1. Bonded Al Foil 2. Al Wire	1. Al Foil-Polyester Tape-Al Foil 2. Tinned Copper	Silver plated Copper
1.87	2.25	1.12	2.20	3.58	2.13	3.00	-----	-----	2.41
FEP	FEP	FEP	-----	-----	FEP	PVC	PVC	PVC	PVC
2.06	2.59	1.42	-----	-----	2.54	4.04	6.96	7.00	3.66
-40°C to +200°C	-40°C to +200°C	-65°C to +165°C	-40°C to +125°C	-40°C to +125°C	-50°C to +165°C	-30°C to +75°C	-30°C to +75°C	-30°C to +75°C	-20°C to +105°C
Blue	Blue	Brown	-----	-----	Brown	Black	Black	Black	Blue

9 mm	12 mm	10 mm	3.18 mm	6.35 mm	10.2 mm	38.1 mm	69.85 mm	69.85 mm	19.05 mm
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SMA, SMA 2.92, SMP	SMA 2.92	HMHF1 (U.FL), SMA	SMA, SMP	SMA	MCX, MMCX7, SMB, BNC, DIN 1.0/2.3	HD-BNC™, DIN 1.0/2.3	BNC, HD-BNC™, DIN 1.0/2.3		CJT
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RF25S, BE25S	RF23S	RF047	RF405	RF402	RF179, GRF7-C, GRF7H-C	RFB8T	RFB6T	RFA6T	C28S
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