

RF CABLE SPECIFICATIONS



CABLE TYPE		50 Ω 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 ± 5	50 ± 2	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		2.1	1.56	2.3	2.1		2.3
Dielectric Strength	VAC	1000	500	1000	-----	500	1200	-----	1400
Propagation Delay	nS/m	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 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		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		Tinned 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			PVC	FEP		PVC
	Diameter (mm)	0.81	1.13	1.80		2.79	2.53	2.90	5.00
	Temp Rating	-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		Brown	Blue	Black	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
Termination Options		MHF1, MHF3, SMA	MHF1, SMA	MMCX, MCX, SMA, SMB, BNC, TNC, N Type	IsoRate®	MMCX, MMCXV, MCX, SMA, SMB, BNC, TNC, N Type, Ganged		MMCX, MCX, SMA, BNC, TNC	SMA, TNC, N Type
Samtec Series		MH081	MH113	RF178	IJ5C	RF174	RF316, IJ5C, IJ5H, GRF1-C, GRF1H-C	RS316	RF058



50 Ω MICROWAVE CABLES						75 Ω MICROWAVE CABLES				100 Ω CABLES
MWC-2550-01	MWC-2350-01	MWC-2350CU-01	CCA-047 (.047")	RG 405 (.086")	RG 402 (.141")	RG 179	BELDEN 1855A	BELDEN 1694A	RG 6	TPS-28100-RF
50 ± 1			50 ± 2			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		-----	
1.37 @ 4 GHz	0.7	1.15	2.59 @ 4 GHz	1.04 @ 4 GHz	0.8	0.37	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		-----	
2.1	2.15	2.1	2.04	1.99	1.8	1.42	1.44		2.1	
-----	300		-----	1000		1200	300		2000	-----
4.76	4.72	4.76	-----	4.79		4.83	4.12	4.06	4.03	-----
5.3	7.4		-----	-----	-----	3	5	-----	-----	-----
96.8	95.45	97.80	95.14	104.97	98.072	64	55.7	53.14		38
Silver Plated Copper				Silver Plated Copper Clad Steel	Silver Plated Copper Clad Steel	Silver Plated Copper	Bare Copper			Silver Plated Copper
25	23	28	24	19	30	23	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		2/0.85	
0.45	0.57	0.29	0.51	0.92	0.30	0.58	1.02		1.97	
0.105	0.071	-----	0.67	0.02	0.34	0.066	0.021		0.029	
Solid FEP		FEP	PTFE	PTFE	PTFE	FHDPE	FHDPE		FEP	
1.46	1.85	0.92	1.68	2.98	1.58	2.59	4.57		1.97	
1. Flat Silver Plated Copper 2. Silver Plated Copper Braid	1. Flat Silver Plated Copper 2. Copper Tape 3. Silver Plated Copper Braid	1. Flat Silver Plated Copper 2. Silver Plated Copper Braid	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	PVC	PVC		PVC	
2.06	2.59	1.42	-----	-----	2.54	4.04	6.96	7.00	3.66	
-40 °C to +200 °C		-65 °C to +165 °C	-40 °C to +125 °C		-50 °C to +165 °C	-30 °C to +75 °C	-30 °C to +75 °C		-20 °C to +105 °C	
Blue	Violet	Brown	-----	-----	Brown	Black			Blue	
9 mm	12 mm	6 mm	10 mm	3.18 mm	6.35 mm	10.2 mm	38.1 mm	69.85 mm		19.05 mm
SMA, SMP	3.50, 2.92	2.92, 2.40, SMA, SMP	HMHF1 (U.FL), SMA	SMA, SMP	SMA	MCX, MMCX7, SMB, BNC, DIN 1.0/2.3, Ganged	HD-BNC™, DIN 1.0/2.3	BNC, HD-BNC™, DIN 1.0/2.3		CJT
RF25S	BDRA, BQRA, RF23S	RF23C, BE40A	RF047	RF405	RF402	RF179, GRF7-C, GRF7H-C	RFB8T	RFB6T	RFA6T	C28S