

JBY LOW LOSS COAXIAL CABLE

JBY cable can be used in many applications such as GPS,WLL,WLAN,Mobile antenna's,etc.

Part Number	JBY100		JBY195		JBY200		JBY240	
DIMENSIONS								
Center Conductor Diameter (inch) (mm)	0.019 0.48		0.037 0.95		0.044 1.13		0.056 1.42	
Dielectric Diameter (inch) (mm)	0.06 1.52		0.113 2.87		0.116 2.95		0.15 3.81	
Outer Conductor Diameter (inch) (mm)	0.064 1.63		0.117 2.98		0.12 3.06		0.154 3.91	
Diameter over Overall Braid (inch) (mm)	0.083 2.1		0.135 3.44		0.139 3.53		0.177 4.5	
Jacket Diameter (inch) (mm)	0.11 2.79		0.195 4.95		0.195 4.95		0.24 6.1	
MATERIAL SPECIFICATIONS								
Jacket	PVC		Polyethylene		Polyethylene		Polyethylene	
Overall Braid	Tinned Copper		Tinned Copper		Tinned Copper		Tinned Copper	
Outer Conductor	Aluminium Tape		Aluminium Tape		Aluminium Tape		Aluminium Tape	
Dielectric	Solid Polyethylene		Foamed Polyethylene		Foamed Polyethylene		Foamed Polyethylene	
Center Conductor	Bare Copper		Bare Copper		Bare Copper		Bare Copper	
ELECTRICAL CHARACTERISTICS								
DC resistance inner conductor (Ohms/1000Ft) (Ohms/1000m)	26.8 88		7.6 24.94		5.37 17.6		3.2 10.5	
DC resistance outer conductor (Ohms/1000Ft) (Ohms/1000m)	14.5 47.57		4.9 16.08		4.9 16.1		3.89 12.76	
Impedance	50±2		50±2		50±2		50±2	
Capacitance (Nominal) (pF/ft) (pF/m)	25.3 83		3.18 80.7		24.5 80.4		24.2 79.4	
Inductance (uH/ft) (uH/m)	0.077 0.25		0.064 0.21		0.06 0.2		0.06 0.2	
Velocity of propagation (%)	66		80		83		84	
Dielectric strength	DC500V		DC1000V		DC1000V		DC1500V	
Peak power rating	0.6kW		2.5KW		2.5KW		5.6KW	
Cutt off frequency (GHz)	90GHz		41		39		31	
Shielding effectiveness	>90dB		>90dB		>90dB		>90dB	
Phase Stability	/		<10ppm/°C		<10ppm/°C		<10ppm/°C	
Max. Attenuation (dB/100Ft) Max Power (Watts)	Attenuation	Power	Attenuation	Power	Attenuation	Power	Attenuation	Power
30MHz	3.93	230	1.98	850	1.89	1020	1.40	1490
50MHz	5.09	180	2.56	660	2.38	790	1.80	1150
150MHz	8.96	100	4.45	380	4.15	450	3.11	660
220MHz	10.91	80	5.40	310	5.03	370	3.81	540
450MHz	15.82	60	7.77	210	7.10	260	5.43	380
900MHz	22.84	50	11.13	150	10.27	180	7.77	260
1500MHz	30.09	40	14.54	120	13.48	140	10.30	200
1800MHz	33.23	30	16.01	110	14.76	130	11.52	180
2000MHz	35.21	20	16.89	100	15.64	120	12.20	170
2500MHz	39.82	10	19.02	90	17.68	100	13.90	150
5800MHz	64.12	10	30.49	60	29.57	70	21.65	100
MECHANICAL CHARACTERISTICS								
Max. Operating Temperature (°C)	-20 to +60		-40 to +80		-40 to +80		-40 to +80	
Min. Bend Radius (inch) (mm)	0.25 6.4		1 25.4		1 25.4		1.5 38	
Weight (g/Ft) (g/M)	4.6 15.1		12 39.4		12 39.4		16 52.5	

CABLE

Part Number	JBY400		JBY500		JBY600	
DIMENSIONS						
Center Conductor Diameter (inch) (mm)	0.108 2.74		0.142 3.61		0.176 4.47	
Dielectric Diameter (inch) (mm)	0.285 7.25		0.37 9.4		0.455 11.56	
Outer Conductor Diameter (inch) (mm)	0.291 7.39		0.376 9.55		0.461 11.71	
Diameter over Overall Braid (inch) (mm)	0.32 8.13		0.405 10.29		0.49 12.45	
Jacket Diameter (inch) (mm)	0.405 10.29		0.5 12.7		0.59 14.99	
MATERIAL SPECIFICATIONS						
Jacket	Polyethylene					
Overall Braid	Tinned Copper					
Outer Conductor	Aluminium Tape					
Dielectric	Foamed Polyethylene					
Center Conductor	Copper clad aluminium					
ELECTRICAL CHARACTERISTICS						
DC resistance inner conductor (Ohms/1000Ft) (Ohms/1000m)	1.37 4.5		0.82 2.69		0.54 1.77	
DC resistance outer conductor (Ohms/1000Ft) (Ohms/1000m)	1.65 5.41		1.27 4.17		1.2 3.94	
Impedance	50±2		50±2		50±2	
Capacitance (Nominal) (pF/ft) (pF/m)	23.9 78.4		23.6 77.4		23.4 76.8	
Inductance (uH/ft) (uH/m)	0.06 0.2		0.059 0.19		0.058 0.19	
Velocity of propagation (%)	86		86		87	
Dielectric strength	DC2500V		DC3000V		DC4000V	
Peak power rating	16KW		22KW		40KW	
Cutt off frequency (GHz)	16.2		12.6		10.3	
Shielding effectiveness	>90dB		>90dB		>90dB	
Phase Stability	<10ppm/°C		<10ppm/°C		<10ppm/°C	
Max. Attenuation (dB/100Ft)	Attenuation	Power	Attenuation	Power	Attenuation	Power
Max Power (Watts)						
30MHz	0.71	3300	0.61	4400	0.46	5500
50MHz	0.95	2600	0.73	3400	0.61	4200
150MHz	1.62	1500	1.31	1900	1.07	2400
220MHz	1.95	1200	1.55	1600	1.37	2000
450MHz	2.87	830	2.23	1090	1.89	1350
900MHz	4.15	580	3.48	750	2.80	930
1500MHz	5.43	440	4.42	570	3.75	700
1800MHz	6.04	400	5.03	520	4.18	630
2000MHz	6.34	370	5.18	490	3.90	590
2500MHz	7.17	330	5.95	430	5.03	520
5800MHz	11.74	210	10.06	260	8.54	320
MECHANICAL CHARACTERISTICS						
Max. Operating Temperature (°C)	-40 to +80		-40 to +80		-40 to +80	
Min. Bend Radius						
(inch)	2		2.5		3	
(mm)	50		64		76.2	
Weight						
(g/Ft)	38		59		61	
(g/M)	125		194		201	