

CA00102
Brilliance Assemblies™
1505F (F-F)

Rev. 1/ 2006-01-26 Page 1 of 2

Application

The Brilliance Assemblies™ line includes superflex 75 Ohm broadcast quality 1505F HD/SD with high professional connectors with excellent connector pull strength and less signal loss. Perfect for cable TV, digital headends, satellite, antenna and high performance customer premise applications

Construction & Dimensions



1. Cable

Item	1505F
Material	stranded, bare copper
Diameter	0.8/3.7 mm
Material	gas injected HDPE
Shielding	double, 95% tinned copper braid
Jacket	PVC
Diameter	6.15 mm
Color	violet, black, red, green, blue, yellow, white or orange

2. Connector

Item	ADC CF-1
Type	F (precision threads)
Impedance	true 75 Ω
Body Material/Plating	tarnish-resistant electroless nickel plating
Center Conductor	gold-plated with locking center pin
Insulator	precision-molded Ultem®
Crimp hub	diamond-knurled and long 12.7mm crimp sleeve
Strain Relief Boot	PVC

3. Assembly

Assembled Lengths

2 connectors, each on both ends

Nom. assembly weight

m	0.5	1	2	3	5	6	15	20	30	45
kg	0.08	0.12	0.19	0.27	0.42	0.49	1.17	1.54	2.29	3.42

CA00102
Brilliance Assemblies™
1505F (F-F)

Rev. 1/ 2006-01-26 Page 2 of 2

Requirements and test methods

Electrical characteristics

4. Cable

Mean characteristic impedance	75 ± 1.5 Ω
Nom. capacitance conductor to shield	55.8 pF/m
Nom. velocity of propagation	80%
Nom. Delay	4.265 ns/m
Return loss at 5-3000 MHz	≥ 15 dB

Nominal Attenuation

MHz	dB/100m	MHz	dB/100m
1	0.7	360	19.7
3.58	1.6	540	24.3
5	2.0	720	28.5
71.5	8.2	1500	43.6
135	11.5	2250	55.4
270	16.7	3000	66.6

5. Connector

Return Loss	1 GHz	≥ 35dB
	2 GHz	≥ 30dB
	3 GHz	≥ 26dB

Insertion Loss

MHz	dB/100m (better than)
0.3 - 500	-0.18
500 - 860	-0.22
860 - 1000	-0.23
1000 - 1750	-0.29
1750 - 2150	-0.32
2150 - 3000	-0.40

6. Assembly

Amp. Rating	5 A
-------------	-----



Mechanical and physical characteristics

Temperature range - storage/operation	-30°C to +70°C
Temperature range - installation	-5 °C to + 50°C
Minimum bending radius	10x Ø cable
Pulling out force	250 N

Ordering information

Brilliance Assemblies™ are shipped with plastic bags around the connectors.