


UB Brochure




2020



中華民國商標註冊證

註冊號數：02058756
商標權人：長實有限公司

名稱：標誌計畫
圖樣：




本標商標不與「Ultra Tiny BNC」、「Fully Compatible with HD BNC & Micro BNC」文字主張商標權。

權利期間：自 2020 年 5 月 16 日起至 2030 年 5 月 15 日止
類別：商標法施行細則第 19 條 第 009 類
商品或服務名稱：開關、插頭、插座、端子、電阻、同軸電纜、訊號線、同軸電纜控制、連接器。

經濟部智慧財產局 局長 **洪淑敏**

中華民國 109 年 5 月 16 日






Introduction

According to

1. Serial digital interface (SDI)
2. 6G-SDI (SMPTE ST2081)
3. 12G-SDI (SMPTE ST2082)

Why to use

The use of digital video has become more commonplace, new DTV/DVB systems actually and more stringent audio requirement than previously faced.

The broadcast landscape is undergoing profound changes. 1GHz can't be satisfied, as it's up to 3GHz (6GHz, 12GHz).

To meet the demand, S-Conn has developed many new series connectors to embrace market disruption.

Why to choose

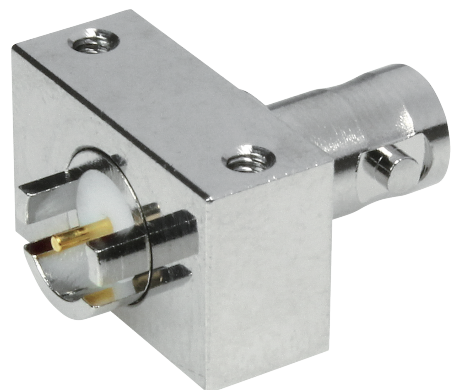
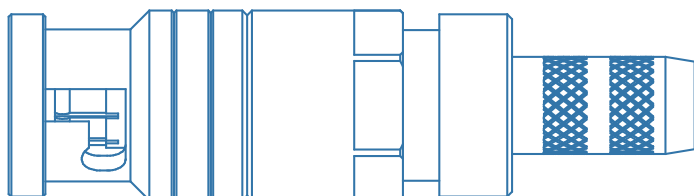
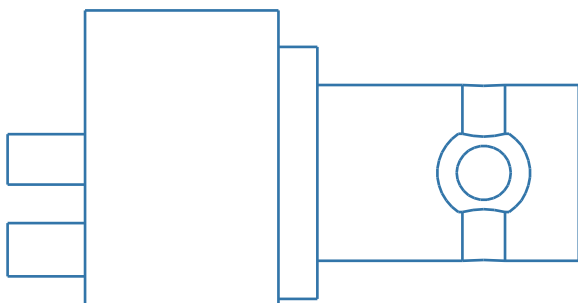
Ultra Tiny BNC delivers Real 75 ohm performance in a PCB Mounting type 51% smaller than traditional BNC connectors.

Design to enhance electrical and mechanical performance, the Ultra Tiny BNC connector with the trusted bayonet interface, push and turn mating same as the old faction BNC. Provided a reliable locking way to make sure the mating could be fast and correctly positioned.

To meet the new demand, S-Conn develops not only connectors also cables to provide an Integrated total solution for global customers. Our quality can meet the electrical and mechanical requirement accordingly..

Features

1. Fully Compatible with HD/Micro BNC
2. Quality tested according to US MIL-STD-202
3. Frequency range optimum up to 12 GHz



Specification

Electrical

Impedance	75Ω
VSWR	≦ 1.2 (0 ~ 6 GHz) , ≦ 1.3 (6 ~ 12 GHz)
RF Leakage	≧ 55 dB
Dielectric Withstanding Voltage	1500 V rms
Voltage Rating	≧ 500 V rms (depending on cable)
Center Contact Resistance	≦ 3 mΩ
Outer Contact Resistance	≦ 2.5 mΩ
Insulation Resistance	≧ 5 GΩ

Mechanical

Mating	Bayonet Coupling
Connector Durability	≧ 500 Cycles (for beryllium copper female contact only)
Engagement Force	0.6 lbs ~ 2.5 lbs
Cable Retention Force	≦ 17.1 lbs (for UHD-0.6/2.6) ≦ 13.7 lbs (for UHD-0.8/3.7) ≦ 9.6 lbs (for UHD-179-BK, UHD-179-WH)

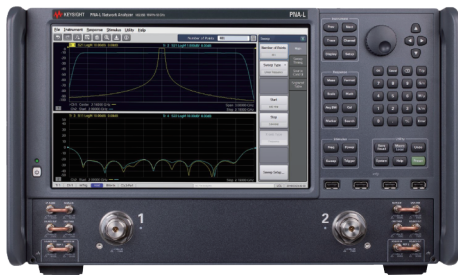
Material

Parts Name	Material	Plating
Body	Brass	Gold or Nickel
Inner Contact	Male : Brass Bronze Female : 1.Phosphor Bronze 2.Beryllium Copper	Gold
Insulator	PTFE	None
Gasket	Silicone Rubber	Red
Crimp Ferrule	Annealed Copper	Same as Body

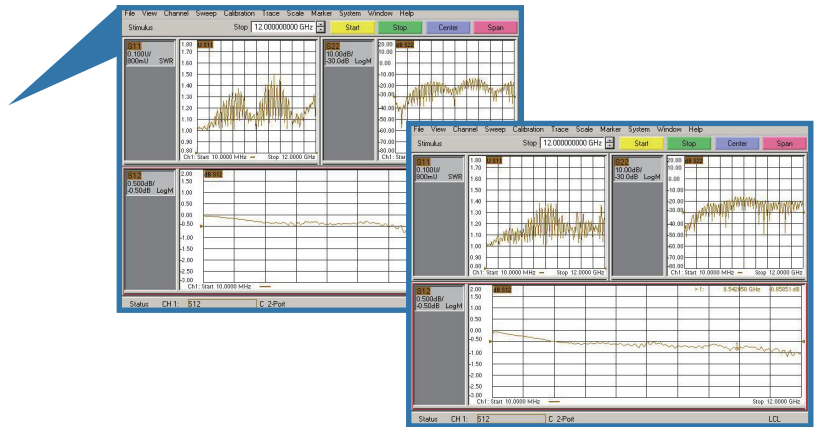
Environmental :

Temperature Range	-65°C to 165°C
Corrosion (Salt Spray)	MIL-STD-202, Method 101, Cond. C
Thermal Shock	MIL-STD-202, Method 107, Cond. B
Mechanical	MIL-STD-202, Method 213, Cond. I
Vibration	MIL-STD-202, Method 204, Cond. D

Apparatus



Keysight VNA (67GHz)



Fully Automatic Stripping Machine



Semi-Automatic Stripping Machine



Laser Marking



Electrodeless variable resistance welding machine

Cable

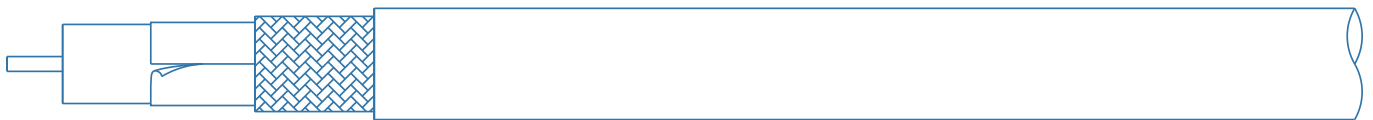
Our connectors are suitable for most available coaxial cable on the market. Tailored ones are available upon request.



UHD-0.6/2.6 (Equivalent to B1855A, B4855R)

UHD-0.8/3.7 (Equivalent to Belden 1505A)

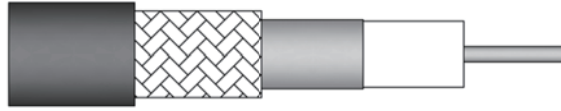
UHD-179-BK, UHD-179-WH (Equivalent to RG179)



Standard assembly length tolerances

Length (mm)	100-500	>500-1000	>1000-1500	>1500-2500	>2500-4000
Tolerances	+5/-0	+10/-0	+15/-0	+25/-0	+40/-0
Length (mm)	>4000-6000	>6000-8000	>8000-10000	>10000-20000	>20000-50000
Tolerances	+60/-0	+100/-0	+300/-0	+600/-0	+1000/-0

UHD-0.6/2.6-BK



Construction

	Material	Diameter(mm)
Center Conductor	SPC	0.584
Dielectric	FPE	2.59
Outer Conductor	AL-PT-AL	2.75
Outer Conductor	TPC	3.40
Jacket	FR-PVC(Black)	4.05

Technical Data

Electical Data : (Nominal)

Impedance	75Ω
Operating Frequency	12 GHz
Capacitance	53 pF/M
Velocity of Signal Propagation	83%
DCR : Inner Conductor Outer Conductor	< 65 Ohm / KM < 18 Ohm / KM
Operating Voltage	300 V rms. max.
Inductance	0.35 μH/M
Signal Delay	4.06 ns/M
Jacket Sparker	2000 VCA
Voltage Withstand (AC)	1000 VCA
Insulation Resistance	> 500 MΩ/KM
Return Loss	5-1600 MHz > 23 dB 1600-4500 MHz > 21 dB 4500-12000 MHz > 15 dB

UHD-0.6/2.6-BK

Mechanical Data

Max. Tensile Strength	75Ω
Min. Bending Radius	14 mm (Static) 46 mm (Repeated)

Environmental Data

Temperature Range	-20 to 75 °C
Outdoor Installation	-5 °C
2011/65/EU (RoHS2)	Compliant

Flame Test

UL Flame Test	UL1581 VW-1
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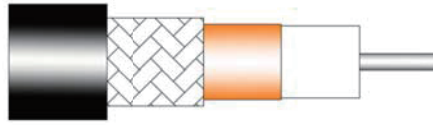
Attenuation

Frequency (MHz)	Attenuation (dB / M)	Frequency (MHz)	Attenuation (dB / M)
5	0.03	1000	0.35
10	0.04	2000	0.50
55	0.09	3000	0.62
100	0.11	4500	0.77
270	0.18	6000	0.91
540	0.26	12000	1.35
720	0.30		

Misc. Information

Weight	25.3 g / M
Marking	S-CONN UHD-0.6/2.6 HI PERFORMANCE VIDEO CABLE SD / HD / UHD
Package	500 M / Roll

UHD-0.8/3.7-BK



Construction

	Material	Diameter(mm)
Center Conductor	SPC	0.813
Dielectric	FHDPE	3.68
Outer Conductor	CU-PT-CU	3.83
Outer Conductor	BC	4.50
Jacket	FR-PVC(Black)	5.9

Technical Data

Electical Data : (Nominal)

Impedance	75Ω
Operating Frequency	12 GHz
Capacitance	53 pF/M
Velocity of Signal Propagation	83%
DCR : Inner Conductor Outer Conductor	< 33.5 Ohm / KM < 18.5 Ohm / KM
Operating Voltage	300 V rms. max.
Inductance	0.35 μH/M
Signal Delay	4.003 ns/M
Jacket Sparker	4000 VCA
Voltage Withstand (AC)	3000 VCA
Insulation Resistance	> 500 MΩ/KM
Return Loss	5-1600 MHz > 23 dB 1600-4500 MHz > 21 dB 4500-12000 MHz > 15 dB

UHD-0.8/3.7-BK

Mechanical Data

Max. Tensile Strength	348 N
Min. Bending Radius	18 mm (Static) 60 mm (Repeated)

Environmental Data

Temperature Range	-30 to 75 °C
Outdoor Installation	-5 °C
2011/65/EU (RoHS2)	Compliant

Flame Test

UL Flame Test	UL1581 VW-1
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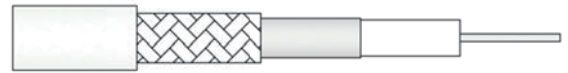
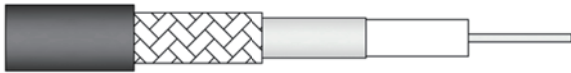
Attenuation

Frequency (MHz)	Attenuation (dB / M)	Frequency (MHz)	Attenuation (dB / M)
5	0.02	1000	0.25
10	0.03	2000	0.35
67	0.07	3000	0.44
100	0.08	4500	0.55
270	0.13	6000	0.65
540	0.18	12000	0.94
720	0.21		

Misc. Information

Weight	45.9 g / M
Marking	S-CONN UHD-0.8/3.7 HI PERFORMANCE VIDEO CABLE SD / HD / UHD
Package	500 M / Roll

UHD-179-BK / UHD-179-WH



Construction

	Material	Diameter(mm)
Center Conductor	SPC	0.31
Dielectric	FPE	1.42
Outer Conductor	AL-PT-AL	1.55
Outer Conductor	TPC	1.95
Jacket	FR-PVC (Black / White)	2.55

Technical Data

Electical Data : (Nominal)

Impedance	75Ω
Operating Frequency	12 GHz
Capacitance	53 pF/M
Velocity of Signal Propagation	80%
DCR : Inner Conductor Outer Conductor	< 235 Ohm / KM < 36 Ohm / KM
Operating Voltage	300 V rms. max.
Signal Delay	4.3 ns/M
Jacket Sparker	1000 VCA
Voltage Withstand (AC)	500 VCA
Insulation Resistance	> 10 GΩ/KM
Return Loss	5-1600 MHz > 23 dB 1600-4500 MHz > 21 dB 4500-12000 MHz > 15 dB

UHD-179-BK / UHD-179-WH

Mechanical Data

Max. Tensile Strength	85 N
Min. Bending Radius	8 mm (Static) 30 mm (Repeated)

Environmental Data

Temperature Range	-20 to 75 °C
Outdoor Installation	-5 °C
2011/65/EU (RoHS2)	Compliant

Flame Test

UL Flame Test	UL1581 VW-1
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Attenuation

Frequency (MHz)	Attenuation (dB / M)	Frequency (MHz)	Attenuation (dB / M)
5	0.06	1000	0.70
10	0.08	2000	1.01
100	0.23	3000	1.26
270	0.36	4500	1.56
350	0.41	6000	1.75
540	0.51	12000	2.50
720	0.59		

Misc. Information

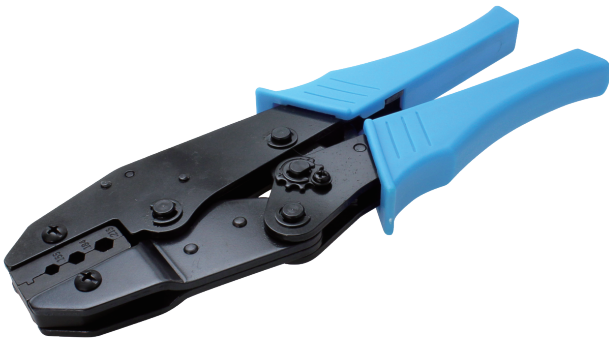
Weight	12 g / M
Marking	S-CONN UHD-179 HI PERFORMANCE VIDEO CABLE SD / HD / UHD
Package	500 M/ Roll

Hand Tool

HT-UB



HT-909



HT-910



Model Number	For Ferrule			For Inner Contact				Application of Cables
HT-909FM/HT-910FM								Frame only
HT-909G/HT-910G	.178	.128		.068				UHD-179....
HT-909H/HT-910H	.215	.178		.068	.042			Flex 5A....
HT-909M/HT-910M	.133	.128	.100	.068	.042			UHD-179, 1.37 (75 Ohm)....
HT-909N/HT-910N	.324	.255	.215	.100	.068			UHD-0.8/3.7-BK....
HT-909P/HT-910P		.093	.078	.068	.052	.035	.028	For inner contact only
HT-909R/HT-910R	.255	.184	.155					B1855A, B4855R, UHD-0.6/2.6 Cable....
HT-909X/HT-910X	According to your drawing. (Tailored is accepted)							

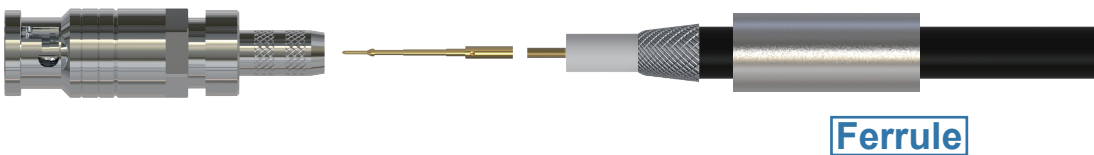
Unit:Inch

Cable Assembly Instruction

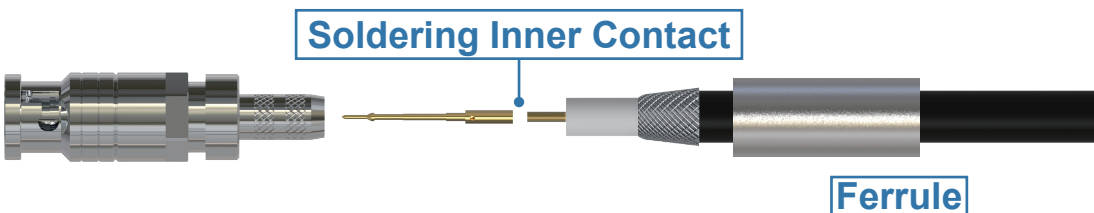
- Step 1.** Cutting & stripping period
(Refer to S-Conn's recommended stripping dimensions on drawing.)



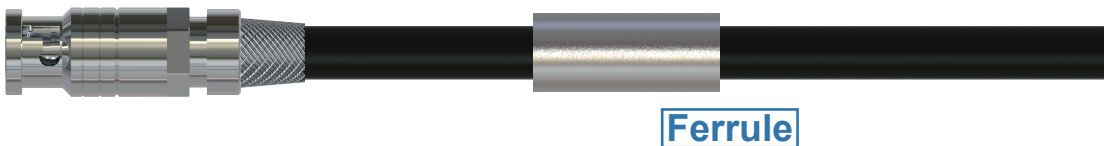
- Step 2.** Sliding the ferrule and combing the braided wire backward.



- Step 3.** Soldering the inner contact with the conductor of cable.



- Step 4.** Inserting the inner contact into the body and combing the braided wire forward on the mandril.



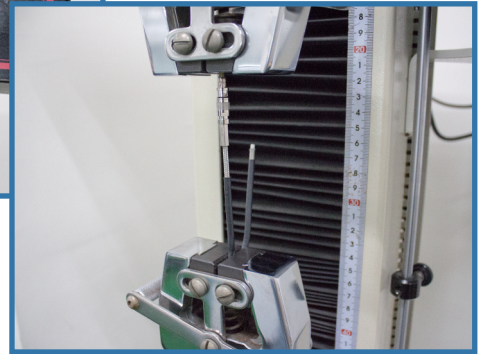
- Step 5.** Sliding the ferrule over braided and crimp it with a recommended hand tool.



- Step 6.** Testing the electrical functions.



Cable Retention



Tensile Testing Machine

Push & Pull Test Machine

Applications



Broadcast



Closed Circuit Television (CCTV)



High definition television (HDTV)