

BTTF*-*Q

BTTF2-*Q – 2 Port Taps

BTTF4-*Q – 4 Port Taps

BTTF8-*Q – 8 Port Taps

F-Port Power Extracting Taps

FEATURES

- Support expanded bandwidth up to 1218 MHz
- Enable Cable Wi-Fi® Access Point powering via the F-port
- Improve network performance with signal conditioning plug-ins
- High quality RF connection with auto-seize F-connectors
- Maintain existing install base with compatibility back to “F” series FFT housings
- High level of network resilience with 6kV surge resistance
- Maintain RF and AC continuity with integrated bypass capability



PRODUCT OVERVIEW

ARRIS 1.2 GHz power extracting taps are capable of delivering video, telephony, and data over the broadband hybrid fiber coax system. These taps have all of the same features and performance as our standard Q-series FFT taps, including 12 ampere power passing and surge resiliency, but with the additional feature of power extracting for Cable Wi-Fi applications.

The BTTF*-*Q taps extract power from the cable feeder and deliver it to the Cable Wi-Fi Access Point via the F-Port (Port 1, jumper selectable). RF signals are distributed through the F-ports to the coaxial drop, as well.

BTTF*-*Q INSERTION LOSS SPECIFICATIONS¹ (5-1218 MHz)

Insertion Loss (dB)	Nom. Tap Value	5 MHz Typ/Max	10 MHz Typ/Max	50 MHz Typ/Max	100 MHz Typ/Max	450 MHz Typ/Max	550 MHz Typ/Max	750 MHz Typ/Max	870 MHz Typ/Max	1000 MHz Typ/Max	1218 MHz Typ/Max
MODEL NO. BTTF2-*Q											
BTTF2-4TQ	4.0	—	—	—	—	—	—	—	—	—	—
BTTF2-7Q	7.0	3.6/4.1	3.4/3.8	3.2/3.7	3.4/3.8	4.0/4.3	4.1/4.4	4.1/4.4	4.1/4.4	3.9/4.5	4.7/5.4
BTTF2-10Q	10.0	1.65/2.2	1.8/1.9	1.9/1.9	2.1/2.2	2.4/2.5	2.5/2.6	2.6/2.7	2.8/3.0	3.1/3.2	3.6/3.8
BTTF2-12Q	12.0	1.2/1.9	1.0/1.8	1.0/1.8	1.2/2.1	1.5/2.2	1.6/2.5	1.8/2.6	2.0/2.9	2.3/3.2	2.8/3.8
BTTF2-14Q	14.0	0.9/1.5	0.8/1.4	0.8/1.4	1.0/1.5	1.3/1.8	1.4/2.0	1.6/2.1	1.7/2.3	1.9/2.5	2.2/2.9
BTTF2-17Q	17.0	0.7/1.4	0.6/1.3	0.6/1.3	0.7/1.5	1.1/1.7	1.2/1.7	1.4/1.8	1.5/1.8	1.6/1.8	1.7/2.4
BTTF2-20Q	20.0	0.5/1.2	0.5/1.1	0.5/1.1	0.6/1.3	1.0/1.5	1.1/1.6	1.2/1.7	1.3/1.8	1.5/1.8	1.8/2.2
BTTF2-23Q	23.0	0.4/0.9	0.4/0.8	0.4/0.9	0.6/1.0	0.8/1.2	0.9/1.4	1.1/1.5	1.3/1.5	1.4/1.8	1.8/2.2
BTTF2-26Q	26.0	0.4/0.8	0.3/0.8	0.3/0.9	0.3/0.9	0.6/1.4	0.7/1.5	0.8/1.6	0.9/1.6	1.0/1.8	1.3/2.2
BTTF2-29Q	29.0	0.4/0.8	0.4/0.8	0.3/0.9	0.3/0.9	0.6/1.4	0.7/1.5	0.8/1.6	0.9/1.6	1.0/1.8	1.4/2.2

Insertion Loss (dB)	Nom. Tap Value	5 MHz Typ/Max	10 MHz Typ/Max	50 MHz Typ/Max	100 MHz Typ/Max	450 MHz Typ/Max	550 MHz Typ/Max	750 MHz Typ/Max	870 MHz Typ/Max	1000 MHz Typ/Max	1218 MHz Typ/Max
MODEL NO. BTTF4-*Q											
BTTF4-7TQ	7.2	—	—	—	—	—	—	—	—	—	—
BTTF4-10Q	10.0	3.8/4.0	3.5/3.8	3.4/3.7	3.3/3.8	4.1/4.4	4.1/4.6	4.1/4.6	4.1/4.6	4.0/4.6	4.3/5.4
BTTF4-14Q	14.0	1.7/2.2	1.5/2.0	1.3/1.9	1.4/2.2	1.9/2.5	2.2/2.7	2.5/2.9	2.6/3.1	2.8/3.2	3.0/3.8
BTTF4-15.5Q	15.5	1.3/1.8	1.1/1.6	1.1/1.6	1.1/1.8	1.7/2.0	2.0/2.1	2.3/2.5	2.5/2.8	2.7/3.2	3.0/3.6
BTTF4-17Q	17.0	0.9/1.5	0.8/1.4	0.8/1.4	0.8/1.7	1.3/1.8	1.5/2.0	1.7/2.0	1.8/2.3	2.0/2.6	2.3/2.9
BTTF4-20Q	20.5	0.7/1.4	0.6/1.3	0.6/1.2	0.7/1.4	1.1/1.6	1.3/1.6	1.4/1.8	1.6/2.0	1.7/2.2	1.9/2.4
BTTF4-23Q	23.0	0.5/1.2	0.4/1.0	0.4/1.0	0.5/1.1	0.9/1.4	1.0/1.5	1.2/1.6	1.3/1.8	1.5/1.9	1.9/2.2
BTTF4-26Q	26.0	0.4/0.9	0.4/0.7	0.4/0.7	0.5/0.9	0.8/1.0	0.9/1.2	1.1/1.4	1.2/1.9	1.5/2.0	2.0/2.2
BTTF4-29Q	29.0	0.4/0.9	0.3/0.7	0.3/0.7	0.4/0.9	0.7/1.0	0.8/1.2	1.0/1.4	1.2/1.9	1.4/2.0	1.9/2.2

Insertion Loss (dB)	Nom. Tap Value	5 MHz Typ/Max	10 MHz Typ/Max	50 MHz Typ/Max	100 MHz Typ/Max	450 MHz Typ/Max	550 MHz Typ/Max	750 MHz Typ/Max	870 MHz Typ/Max	1000 MHz Typ/Max	1218 MHz Typ/Max
MODEL NO. BTTF8-*Q											
BTTF8-10TQ	10.0	—	—	—	—	—	—	—	—	—	—
BTTF8-14Q	14.2	3.8/4.0	3.4/3.8	3.3/3.7	3.4/3.9	4.2/4.5	4.4/4.7	*/4.7	4.3/4.7	4.4/4.7	4.7/5.4
BTTF8-17Q	17.8	1.6/2.2	1.3/2.0	1.4/2.0	1.5/2.1	2.0/2.6	2.0/2.7	*/3.0	2.5/3.1	2.6/3.3	3.0/3.8
BTTF8-20Q	20.0	1.2/1.5	1.0/1.4	1.0/1.4	1.0/1.4	1.5/1.9	1.5/2.1	*/2.1	2.0/2.3	2.2/2.5	2.3/3.0
BTTF8-23Q	23.5	0.7/1.3	0.6/1.1	0.6/1.1	0.7/1.4	1.0/1.5	1.1/1.7	*/1.8	1.4/2.0	1.6/2.2	2.0/2.4
BTTF8-26Q	26.1	0.4/1.0	0.4/0.9	0.4/0.9	0.5/1.0	0.8/1.2	0.9/1.4	*/1.6	1.2/1.6	1.4/1.8	1.7/2.2
BTTF8-29Q	29.2	0.4/1.0	0.3/0.9	0.3/0.9	0.4/1.0	0.8/1.2	0.9/1.4	*/1.6	1.2/1.6	1.4/1.8	1.8/2.2

NOTE:

1. The BTTF*-*Q is shipped standard with a jumper (T-JP) installed into the plug-in module sockets.

BTF*-*Q SPECIFICATIONS TAP TO OUTPUT ISOLATION, (dB) NOMINAL (5-1218 MHz)

MODEL - BTF2-*Q	5-9 MHz	10-85 MHz	86-300 MHz	301-749 MHz	750-899 MHz	900-1218 MHz
BTF2-4TQ	—	—	—	—	—	—
BTF2-7Q	20	25	21	22	20	20
BTF2-10Q	20	25	22	22	20	20
BTF2-12Q	22	25	23	23	22	20
BTF2-14Q	22	26	26	26	22	22
BTF2-17Q	26	28	30	30	28	25
BTF2-20Q	26	33	33	31	30	28
BTF2-23Q	26	35	35	34	32	28
BTF2-26Q	26	35	35	35	35	28
BTF2-29Q	26	35	35	35	35	28

MODEL - BTF4-*Q	5-9 MHz	10-85 MHz	86-300 MHz	301-749 MHz	750-899 MHz	900-1218 MHz
BTF4-7TQ	—	—	—	—	—	—
BTF4-10Q	20	25	23	23	22	20
BTF4-14Q	22	27	27	27	25	24
BTF4-15.5Q	24	28	28	28	26	24
BTF4-17Q	26	28	28	28	26	24
BTF4-20Q	30	34	34	34	32	27
BTF4-23Q	32	35	35	35	34	27
BTF4-26Q	34	36	35	35	35	27
BTF4-29Q	35	36	35	35	35	28

MODEL - BTF8-*Q	5-9 MHz	10-85 MHz	86-300 MHz	301-749 MHz	750-899 MHz	900-1218 MHz
BTF8-10TQ	—	—	—	—	—	—
BTF8-14Q	20	25	25	25	24	24
BTF8-17Q	25	30	30	28	26	24
BTF8-20Q	30	34	34	34	30	28
BTF8-23Q	32	35	35	34	32	28
BTF8-26Q	34	35	35	35	34	28
BTF8-29Q	35	35	35	35	34	28

SPECIFICATIONS

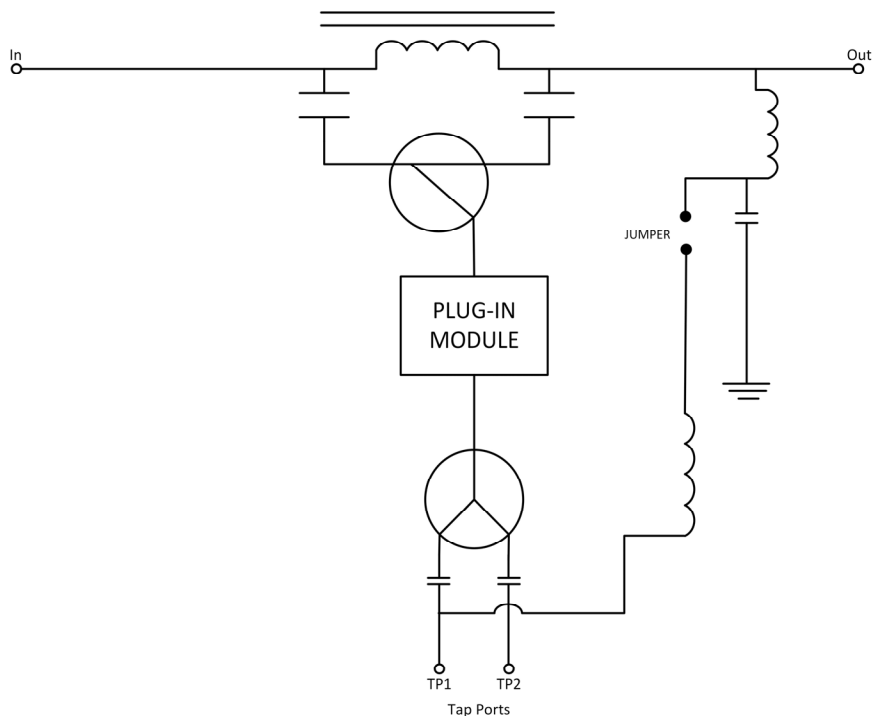
Tap Value Tolerance (*)	2-way	5 – 1000 MHz	± 2.0 dB	
		1000 – 1218 MHz	± 2.5 dB	
	4-way	5 – 1000 MHz	± 2.0 dB	
		1000 – 1218 MHz	± 2.5 dB	
	8-way	5 – 1000 MHz	± 3.5 dB	
		1000 – 1218 MHz	± 3.8 dB	
Tap to Tap Isolation		5 – 9 MHz	20 dB	
		10 – 85 MHz	25 dB	
		86 – 300 MHz	24 dB	
		301 – 749 MHz	23 dB	
		750 – 1218 MHz	20 dB	
Return Loss: Tap Ports		5 – 9 MHz	16 dB	
		10 – 749 MHz	17 dB	
		750 – 1000 MHz	17 dB	
		1001 – 1218 MHz	16 dB	
Return Loss: In/Out Ports*		5 – 9 MHz	16 dB	
		2-way Taps	10 – 749 MHz	17 dB
		4- and 8-way Taps	10 – 749 MHz	16 dB
			750 – 1218 MHz	16 dB

SPECIFICATIONS

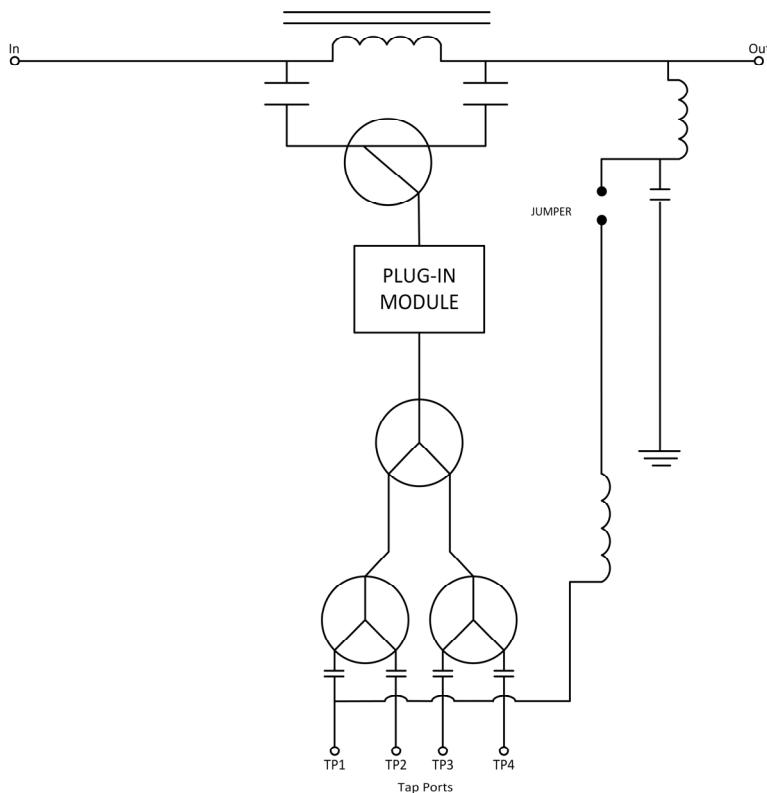
Power Passing	12 Amperes Maximum (60/90 volts)
Port Power Extracting (Tap Port 1)	2 A max
Surge: In/Out and F-Port	6 kV Combination Wave
Hum Modulation (10 Amperes)	
5 – 10 MHz:	60 dB Minimum
11 – 550 MHz:	65 dB Minimum
551 – 1000 MHz:	60* dB Minimum
1001 – 1218 MHz:	55* dB Minimum
RFI	100 dB minimum
Operating Temperature	-40° to +60°C
Dimensions	4.0 x 2.9 x 5.6 inches (10.2 x 7.4 x 14.2 cm)
Weight	1.5 lb (0.69 kg)
Mechanical	SCTE IPS-SP-400 – F-port Interface/SCTE IPS-SP-420 – Entry Port Interface
Emission	47 CFR Part 15 FCC Radio Frequency Devices October 1, 2011, CISPR 22 Ed. 6.0 b:2008, EN 61000-3-2:2006 +A1/A2:2009 Electromagnetic Compatibility (EMC) Part 3-2, EN 61000-3-3:2013- Electromagnetic Compatibility (EMC) – Part 3-3, ICES Issue 6 - Information Technology Equipment (ITE), EN55022:2010/AC:2011
Safety	IEC 60950-22, Edition 2.0 2016-01
Dimensions	5.5 L x 4.5 H x 3.5 D (inches) (13.97 x 11.43 x 8.89 cm)
Weight	1.5 lb (0.69 kg)

* Hum performance can degrade 2-3 dB at 60°C.
 * Tap Port 1 may degrade an additional 1 dB RL at -40°C at 5 MHz.
 * 2 and 4 Port taps have an additional 0.25 dB loss on tap port 1, 8 port taps an additional 0.5 dB loss on tap port 1

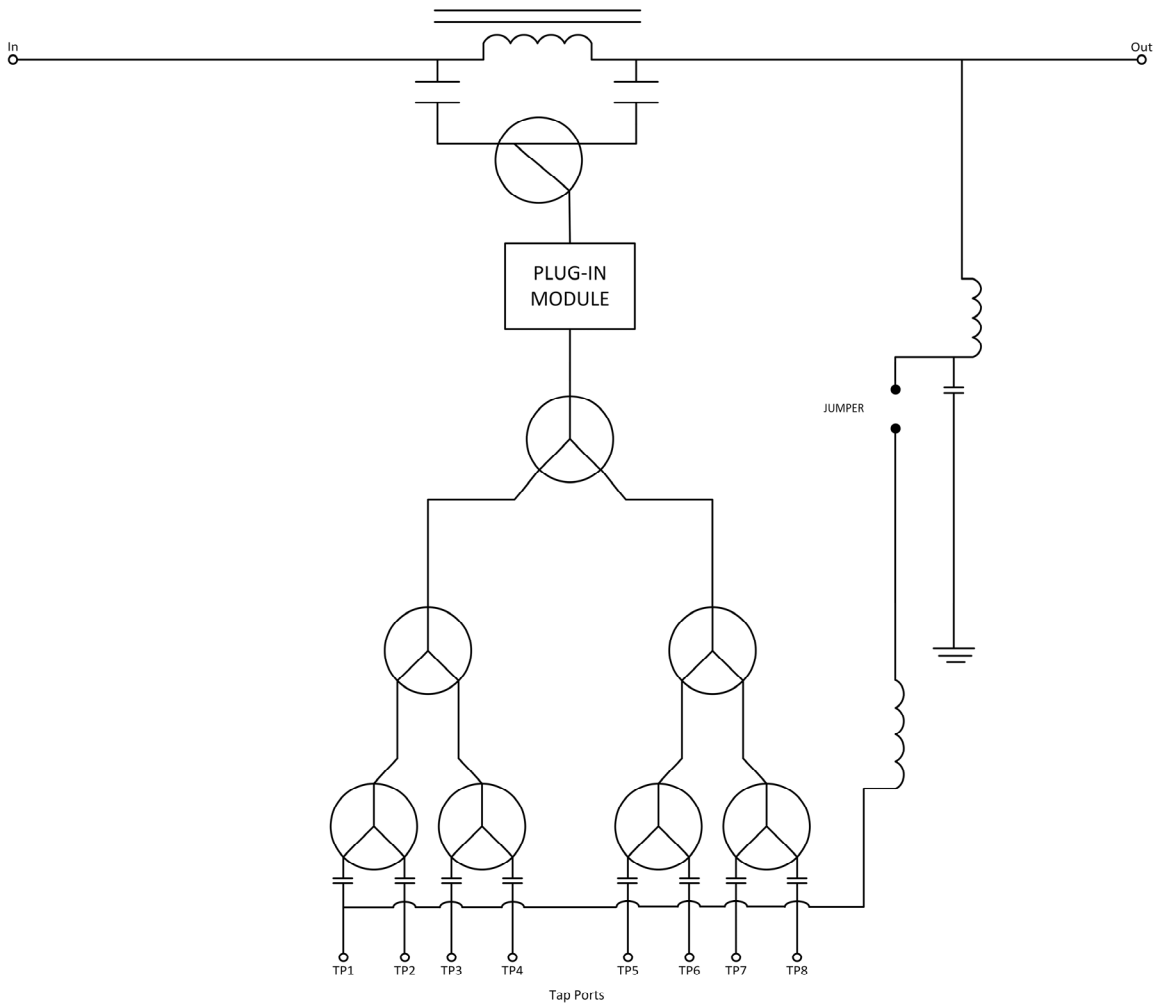
BTTF2-*Q Block Diagram



BTTF4-*Q Block Diagram

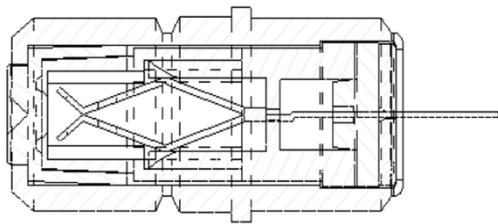


BTTF8-*Q Block Diagram

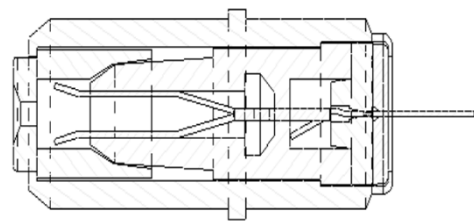


BTTF*-*Q Auto-Seize Connector

F-Connector Conventional F-Connector Design



Auto-Seize Q-Series F-Connector Design



2-WAY ORDERING INFORMATION

Complete Tap	Model Number	Faceplate Only	Model Number
1510490-001	BTTF2-4TQ	1510491-001	BTTF2-4TQ/U
1510490-002	BTTF2-7Q	1510491-002	BTTF2-7Q/U
1510490-003	BTTF2-10Q	1510491-003	BTTF2-10Q/U
1510490-004	BTTF2-12Q	1510491-004	BTTF2-12Q/U
1510490-005	BTTF2-14Q	1510491-005	BTTF2-14Q/U
1510490-006	BTTF2-17Q	1510491-006	BTTF2-17Q/U
1510490-007	BTTF2-20Q	1510491-007	BTTF2-20Q/U
1510490-008	BTTF2-23Q	1510491-008	BTTF2-23Q/U
1510490-009	BTTF2-26Q	1510491-009	BTTF2-26Q/U
1510490-010	BTTF2-29Q	1510491-010	BTTF2-29Q/U
594945-012-00	FFT*-PBA-V (Blank Plate)	N/A	N/A

4-WAY ORDERING INFORMATION

Complete Tap	Model Number	Faceplate Only	Model Number
1510492-001	BTTF4-7TQ	1510493-001	BTTF4-7TQ/U
1510492-002	BTTF4-10Q	1510493-002	BTTF4-10Q/U
1510492-003	BTTF4-14Q	1510493-003	BTTF4-14Q/U
1510492-004	BTTF4-15.5Q	1510493-004	BTTF4-15.5Q/U
1510492-005	BTTF4-17Q	1510493-005	BTTF4-17Q/U
1510492-006	BTTF4-20Q	1510493-006	BTTF4-20Q/U
1510492-007	BTTF4-23Q	1510493-007	BTTF4-23Q/U
1510492-008	BTTF4-26Q	1510493-008	BTTF4-26Q/U
1510492-009	BTTF4-29Q	1510493-009	BTTF4-29Q/U
594945-012-00	FFT*-PBA-V (Blank Plate)	N/A	N/A

8-WAY ORDERING INFORMATION

Complete Tap	Model Number	Faceplate Only	Model Number
1510494-001	BTTF8-10TQ	1510495-001	BTTF8-10TQ/U
1510494-002	BTTF8-14Q	1510495-002	BTTF8-14Q/U
1510494-003	BTTF8-17Q	1510495-003	BTTF8-17Q/U
1510494-004	BTTF8-20Q	1510495-004	BTTF8-20Q/U
1510494-005	BTTF8-23Q	1510495-005	BTTF8-23Q/U
1510494-006	BTTF8-26Q	1510495-006	BTTF8-26Q/U
1510494-007	BTTF8-29Q	1510495-007	BTTF8-29Q/U
594945-012-00	FFT*-PBA-V (Blank Plate)	N/A	N/A

RELATED PRODUCTS

SSP-Q Series System Passives	RF Amplifiers
FFT-Q Series System Taps	Optical Nodes
T-*Q 1.2 GHz Tap Plug-ins	Headend Optics

Customer Care

Contact Customer Care for product information and sales:

- United States: 866-36-ARRIS
- International: +1-678-473-5656

Note: Specifications are subject to change without notice.

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BTTF-Q_DS_30MAY18

(rev 05-2018)

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Taps-BTTF-Q