

BASIC LINE SPLITTERS AND TAPS



Features

- Conforms to RoHS directive
- Meets A class Cenelec standards
- Linear frequency response
- Good port isolation
- Nickel-tin plated HQ housing
- Well screened housings, class A
- Good intermodulation distortion characteristics
- DC blocking capacitors

Technical specifications

**General**

Connectors	F-connectors	1)
Impedance	75 Ω	
Enclosure classification	IP64	
Operating temperature range	-30...+60 °C	
EMC compatibility	EN 60728-2	

**Common technical specifications**

Return loss all ports (min)			
5...10 MHz	20 dB		2)
10...40 MHz	20 dB		2)
40...1006 MHz	20 dB		3)
Screening effectiveness (min)			
5...470 MHz	85 dB		
470...1006 MHz	75 dB		

BSS Splitters



Product code	BSS2	BSS3U	BSS3	BSS4	
Insertion Loss (dB max)					
5...10 MHz	4.0	4.0 / 7.5	6.2	7.5	
10...65 MHz	3.8	3.8 / 7.3	6.1	7.3	
65...470 MHz	3.8	3.8 / 7.4	6.1	7.8	
470...862 MHz	4.2	4.1 / 8.0	6.6	7.8	
862...1006 MHz	4.5	4.3 / 8.5	6.9	8.3	
Isolation Out-Out (dB min)					
5...10 MHz	22	22	22	22	
10...65 MHz	33	35	35	35	
65...1006 MHz	26	26	26	26	4)

BSV Splitters



Product code	BSV6	BSV8
Insertion Loss (dB max)		
5...10 MHz	9.5	10.5
10...65 MHz	9.5	10.5
65...470 MHz	9.5	11.1
470...862 MHz	10.2	11.8
862...1006 MHz	11.3	12.8
Isolation Out-Out (dB min)		
5...10 MHz	22	22
10...65 MHz	33	33
65...1006 MHz	26	26

4)

BTS Taps



**One Way Taps**

Product code	BTS106	BTS108	BTS110	BTS112
Tap Loss (dB)	Typ / Max	Typ / Max	Typ / Max	Typ / Max
5...65 MHz	6.0 / 7.7	8.5 / 10.0	10.0 / 11.5	12.0 / 13.5
65...1006 MHz	6.0 / 7.7	8.5 / 10.0	10.0 / 11.5	12.0 / 13.5
Insertion Loss (dB)	Typ / Max	Typ / Max	Typ / Max	Typ / Max
5...65 MHz	1.9 / 2.3	1.4 / 1.8	0.9 / 1.3	0.8 / 1.2
65...470 MHz	1.8 / 2.2	1.2 / 1.6	1.1 / 1.5	0.7 / 1.1
470...862 MHz	2.2 / 2.6	1.4 / 2.0	1.4 / 1.8	0.8 / 1.2
862...1006 MHz	2.3 / 2.8	1.8 / 2.4	1.6 / 2.0	0.9 / 1.4
Isolation Tap-Out (dB min)				
5...10 MHz	20.0	22.0	24.0	26.0
10...1006 MHz	25.5	27.5	29.0	31.5

4)

**One Way Taps**

Product code	BTS116	BTS120	BTS124	BTS130
Tap Loss (dB)	Typ / Max	Typ / Max	Typ / Max	Typ / Max
5...65 MHz	16.0 / 17.5	20.0 / 21.5	24.0 / 25.5	30.0 / 31.5
65...1006 MHz	16.0 / 17.5	20.0 / 21.5	24.0 / 25.5	30.0 / 31.5
Insertion Loss (dB)	Typ / Max	Typ / Max	Typ / Max	Typ / Max
5...65 MHz	0.6 / 1.1	0.6 / 1.1	0.6 / 1.1	0.6 / 1.1
65...470 MHz	0.5 / 0.9	0.5 / 0.9	0.5 / 0.9	0.5 / 0.9
470...862 MHz	0.6 / 1.0	0.6 / 1.0	0.6 / 1.0	0.6 / 1.0
862...1006 MHz	0.6 / 1.0	0.6 / 1.0	0.6 / 1.0	0.6 / 1.0
Isolation Tap-Out (dB min)				
5...10 MHz	30	34	38	38
10...1006 MHz	32	34	40	40

4)

**Two Way Taps**

Product code	BTS208	BTS210	BTS212	BTS216	
Tap Loss (dB)	Typ / Max	Typ / Max	Typ / Max	Typ / Max	
5...65 MHz	8.0 / 9.5	10.0 / 11.5	12.5 / 14.0	16.0 / 17.5	
65...1006 MHz	8.0 / 9.5	10.0 / 11.5	12.5 / 14.0	16.0 / 17.5	
Insertion Loss (dB)	Typ / Max	Typ / Max	Typ / Max	Typ / Max	
5...65 MHz	3.5 / 4.3	1.7 / 2.2	1.5 / 2.0	1.0 / 1.4	
65...470 MHz	4.0 / 4.3	1.7 / 2.2	1.5 / 2.0	1.2 / 1.6	
470...862 MHz	4.0 / 4.3	2.1 / 2.8	1.7 / 2.2	1.3 / 1.7	
862...1006 MHz	4.0 / 4.5	2.5 / 3.2	1.8 / 2.5	1.6 / 2.0	
Isolation Tap-Out (dB min)					
5...1006 MHz	25	25	25	31	4)
Isolation Tap-Tap (dB min)					
5...1006 MHz	28	28	28	28	4)

**Two Way Taps**

Product code	BTS220	BTS224	BTS230	
Tap Loss (dB)	Typ / Max	Typ / Max	Typ / Max	
5...65 MHz	20.0 / 21.5	24.0 / 25.5	30.0 / 31.5	
65...1006 MHz	20.0 / 21.5	24.0 / 25.5	30.0 / 31.5	
Insertion Loss (dB)	Typ / Max	Typ / Max	Typ / Max	
5...65 MHz	0.7 / 1.0	0.5 / 1.0	0.5 / 1.0	
65...470 MHz	0.5 / 1.0	0.5 / 1.0	0.5 / 1.0	
470...862 MHz	0.6 / 1.1	0.8 / 1.1	0.8 / 1.1	
862...1006 MHz	1.1 / 1.6	1.3 / 1.6	1.3 / 1.6	
Isolation Tap-Out (dB min)				
5...65 MHz	35	38	40	
65...470 MHz	30	33	35	
470...1006 MHz	24	27	30	4)
Isolation Tap-Tap (dB min)				
5...10 MHz	30	30	30	
10...470 MHz	30	30	30	
470...1006 MHz	25	25	25	4)

**Three Way Taps**

Product code	BTS310	BTS312	BTS316	
Tap Loss (dB)	Typ / Max	Typ / Max	Typ / Max	
5...65 MHz	10.0 / 11.5	12.0 / 13.5	16.0 / 17.5	
65...1006 MHz	10.0 / 11.5	12.0 / 13.5	16.0 / 17.5	
Insertion Loss (dB)	Typ / Max	Typ / Max	Typ / Max	
5...65 MHz	4.0 / 4.2	2.5 / 2.9	1.7 / 2.2	
65...470 MHz	4.2 / 4.6	2.3 / 2.8	1.6 / 2.1	
470...862 MHz	4.5 / 4.8	2.8 / 3.5	1.8 / 2.3	
862...1006 MHz	4.8 / 5.0	3.3 / 4.1	1.9 / 2.3	
Isolation Tap-Out (dB min)				
5...10 MHz	25	26	28	
10...65 MHz	28	28	30	
65...1006 MHz	26	26	30	4)
Isolation Tap-Tap (dB min)				
5...10 MHz	28	30	30	
10...65 MHz	30	32	32	
65...1006 MHz	30	32	32	4)

**Three Way Taps**

Product code	BTS320	BTS324	BTS330	
Tap Loss (dB)	Typ / Max	Typ / Max	Typ / Max	
5...65 MHz	20.0 / 21.5	24.0 / 25.5	30.0 / 31.5	
65...1006 MHz	20.0 / 21.5	24.0 / 25.5	30.0 / 31.5	
Insertion Loss (dB)	Typ / Max	Typ / Max	Typ / Max	
5...65 MHz	1.3 / 2.3	1.3 / 1.8	1.3 / 2.0	
65...470 MHz	1.1 / 1.5	1.0 / 1.5	1.5 / 1.5	
470...862 MHz	1.2 / 1.7	1.2 / 1.7	1.2 / 1.7	
862...1006 MHz	1.4 / 1.9	1.4 / 1.9	1.4 / 1.9	
Isolation Tap-Out (dB min)				
5...10 MHz	25	26	26	
10...65 MHz	29	32	32	
65...1006 MHz	32	35	35	4)
Isolation Tap-Tap (dB min)				
5...10 MHz	32	35	35	
10...65 MHz	35	37	37	
65...1006 MHz	40	40	40	4)

BTV Taps

Picture

**Four Way Taps**

Product code	BTV410	BTV412	BTV416	BTV420	BTV424
Tap Loss (dB)	Typ / Max	Typ / Max	Typ / Max	Typ / Max	Typ / Max
5...65 MHz	10.0 / 11.5	12.0 / 13.5	16.0 / 17.5	19.5 / 21.0	24.0 / 25.5
65...1006 MHz	10.0 / 11.5	12.0 / 13.5	16.0 / 17.5	19.5 / 21.0	24.0 / 25.5
Insertion Loss (dB)	Typ / Max	Typ / Max	Typ / Max	Typ / Max	Typ / Max
5...65 MHz	3.5 / 3.9	2.5 / 2.9	1.7 / 2.2	1.0 / 1.5	1.0 / 1.5
65...470 MHz	3.4 / 3.7	2.3 / 3.0	1.6 / 2.1	1.0 / 1.5	1.0 / 1.5
470...862 MHz	3.6 / 4.2	2.8 / 3.5	1.8 / 2.3	1.2 / 1.7	1.2 / 1.7
862...1006 MHz	4.3 / 5.0	3.3 / 4.1	2.0 / 3.0	1.4 / 1.9	1.4 / 1.9
Isolation Tap-Out (dB min)					
5...65 MHz	25	30	31	31	35
65...1006 MHz	30	25	26	30	33 4)
Isolation Tap-Tap (dB min)					
5...1006 MHz	30	30	30	30	30 4)

**Eight Way Taps**

Product code	BTV814	BTV816	BTV820	BTV824	
Tap Loss (dB)	Typ / Max	Typ / Max	Typ / Max	Typ / Max	
5...65 MHz	14.0 / 15.5	16.0 / 17.5	19.5 / 21.0	24.0 / 25.5	
65...1006 MHz	14.0 / 15.5	16.0 / 17.5	19.5 / 21.0	24.0 / 25.5	
Insertion Loss (dB)	Typ / Max	Typ / Max	Typ / Max	Typ / Max	
5...65 MHz	3.8 / 4.1	2.3 / 2.6	1.5 / 1.9	0.8 / 1.5	
65...470 MHz	3.8 / 4.0	2.2 / 2.8	1.4 / 1.6	0.5 / 1.0	
470...862 MHz	4.0 / 4.5	2.8 / 3.5	1.8 / 2.5	0.9 / 2.0	
862...1006 MHz	4.5 / 5.0	3.6 / 4.5	2.4 / 3.3	1.2 / 2.7	
Isolation Tap-Out (dB min)					
5...65 MHz	30	30	30	30	
65...1006 MHz	30	30	30	30	4)
Isolation Tap-Tap (dB min)					
5...65 MHz	30	30	30	30	
65...1006 MHz	30	305	30	30	4)

Notes

- 1) According ANSI/SCTE 02 1997 (formerly IPS SP 406). Minimum inner wire dimension 0.51 mm.
- 2) Typical, for some BTS/BTV tap models RL input minimum is 18 dB
- 3) @ 40 MHz -1.5 dB / octave
- 4) @ 40 MHz -1.5 dB / octave