

DOCSIS 4.0
R E A D Y



Outdoor RF passives

40-SERIES SPLITTERS AND TAPS

The 40-series Splitters, Taps and Power Inserter are high performance passives for splitting signal and power in coaxial branch and distribution networks. The series is loaded with great features and comes mission-ready for 1800 MHz operation.

40-series features

- Frequency range up to 1.8 GHz, Docsis 4.0 compliant
- High performance for use in branch and distribution networks
- Nominal current 12A @ 65VAC
- 5/8" or PG11 connections available
- Test point/probe monitoring connections
- Optional test probes available with frequency range up to 1218MHz

One of Teleste's unique and award winning superior performance passives designed for easy installation and reliability.

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OUTDOOR RF PASSIVES / 40-SERIES

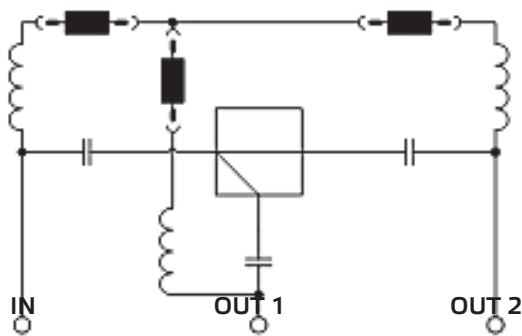
ELECTRICAL SPECIFICATIONS - SPLITTERS								
2-way 40SP402			3-way 40SP603		3-way unbalanced 40SP803		4-way 40SP804	
Insertion Loss (dB, Max.) - In to Out								
Frequency (MHz)	Typ.	QA	Typ.	QA	Typ./QA	Typ./QA	Typ.	QA
12 - 47	3.8	4.3	6.3	7.2	3.8 / 4.3	7.4 / 8.1	7.4	8.1
47 - 470	3.8	4.3	6.6	7.2	3.8 / 4.5	7.6 / 8.3	7.6	8.3
470 - 862	4.3	4.8	7.0	7.5	4.3 / 4.8	8.1 / 8.6	8.1	8.6
862 - 1006	4.6	5.1	7.3	8.0	4.6 / 5.5	8.3 / 9.2	8.3	9.2
1006 - 1218	4.9	5.5	8.1	8.6	4.9 / 5.5	9.1 / 9.6	9.1	9.6
1218 - 1500	5.2	5.8	8.6	9.0	5.2 / 5.8	9.5 / 10.5	9.6	10.5
1500 - 1800	5.5	6.3	8.6	9.3	5.8 / 6.3	10.5 / 11.0	10.5	11.5
Isolation (dB, Min.) - Out to Out								
12 - 47	26.0		26.0		26.0		26.0	
47 - 470	26.0		22.0		22.0		22.0	
470 - 862	22.0		20.0		20.0		20.0	
862 - 1006	20.0		20.0		20.0		20.0	
1006 - 1218	20.0		20.0		20.0		20.0	
1218 - 1500	20.0		17.0		17.0		17.0	
1500 - 1800	17.0		15.0		15.0		15.0	
Return loss (dB, Min.) - All ports								
12 - 100	17.0 ⁽¹⁾		18.0 ⁽¹⁾		18.0 ⁽¹⁾		18.0 ⁽¹⁾	
100 - 1800	18.0 ⁽¹⁾		18.0 ⁽¹⁾		18.0 ⁽¹⁾		18.0 ⁽¹⁾	
ELECTRICAL SPECIFICATIONS - TAPS								
1-way, 10dB 40DC101			1-way, 17dB 40DC171			2-way, 13dB 40DC132		
Insertion Loss (dB, Max.) - In to Out								
Frequency (MHz)	Typ.		QA		Typ.		QA	
12 - 47	1.9		2.3		1.3		1.7	
47 - 470	1.8		2.1		1.1		1.7	
470 - 862	2.0		2.7		1.1		1.7	
862 - 1006	2.3		3.0		1.3		2.0	
1006 - 1218	2.6		3.8		1.6		2.2	
1218 - 1500	3.8		4.2		2.2		3.2	
1500 - 1800	3.8		4.2		2.2		3.2	
Insertion Loss (dB, Max.) - In to Tap								
12 - 1006	10.3 ± 1.0		16.6 ± 1.0		13.0 ± 1.3			
1006 - 1218	10.3 ± 1.2		16.6 ± 1.2		13.0 ± 1.5			
1218 - 1500	10.5 ± 1.5		16.6 ± 1.5		13.0 ± 1.6			
1500 - 1800	10.5 ± 1.5		16.6 ± 1.5		13.0 ± 1.7			
Isolation (dB, Min.) - Out to Tap								
12 - 47	22.0		27.0		26.0			
47 - 470	26.0		29.0		26.0			
470 - 862	22.0		27.0		22.0			
862 - 1006	20.0		24.0		20.0			
1006 - 1218	20.0		22.0		20.0			
1218 - 1800	20.0		20.0		20.0			
Isolation (dB, Min.) - Tap to Tap								
12 - 47	-		-		35.0			
47 - 470	-		-		35.0			
470 - 862	-		-		35.0			
862 - 1006	-		-		32.0			
1006 - 1218	-		-		30.0			
1218 - 1800	-		-		25.0			
Return loss (dB, Min.) - All ports								
12 - 100	17.0 ⁽¹⁾		17.0 ⁽¹⁾		18.0 ⁽¹⁾			
100 - 1800	18.0 ⁽¹⁾		18.0 ⁽¹⁾		18.0 ⁽¹⁾			

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ELECTRICAL SPECIFICATIONS - POWER INSERTER			
40AC15A			
Insertion Loss (dB, Max.) - In to Out			
Frequency (MHz)	Typ.	QA	
12 - 47	0.4	0.7	
47 - 470	0.5	0.8	
470 - 862	0.8	1.1	
862 - 1006	0.9	1.3	
1006 - 1218	1.2	1.5	
1218 - 1500	1.4	1.7	
1500 - 1800	1.7	2.0	
Isolation (dB, Min.) - AC In to RF Out			
12 - 47		60.0	
47 - 470		60.0	
470 - 862		60.0	
862 - 1006		50.0	
1006 - 1218		50.0	
1218 - 1800		35.0	
Return loss (dB, Min.) - All ports			
12 - 100		17.0 ⁽¹⁾	
100 - 1800		18.0 ⁽¹⁾	
GENERAL SPECIFICATIONS - ALL MODELS OF 40-SERIES			
Nominal Impedance	75 Ohm	Frequency Range (MHz)	5-1800 MHz
Operating Temperature Range	-40 C° to +55 C°	Output connectors	PG11 or 5/8 "
Protection	IP66/10PSI	Surge Immunity Test ⁽²⁾ Each port (Min.)	1 kV
Hum nominal current 8A@65VAC		Hum nominal current 10A@65VAC	Hum nominal current 12A@65VAC
12 - 60	60 dBc	12 - 60	55 dBc
60 - 1006	70 dBc	60 - 1006	65 dBc
1006 - 1218	70 dBc	1006 - 1218	65 dBc
1218 - 1800	TBD	1218 - 1800	TBD
Electromagnetic Compatibility (dB, Min.)	5 - 300	95.0	Intermodulation distortion ⁽³⁾ (dBc, Min.)
	300 - 470	90.0	
	470 - 950	85.0	
Class A+ (= Class A +10dB)	950 - 1800	65.0	Before surge
			After 1kV surge
			118.0
			112.0
Nominal Current	AC IN port	15A @ 65 VAC	
	RF AC port	12A @ 65 VAC	
Dimensions (h x w x d) 3-port mechanics	125 mm x 106 mm x 60 mm		Weight 3-port mechanics
			380 g
NOTES			
(1) At F≥40 MHz -1.5 dB per octave, with a minimum of 14 dB			
(2) 1 kV, 1,2/50 μs Surge voltage according to IEC 61000-4-5, EMC (class 2, level 2) applied between the inner and outer conductor of each port			
(3) With 2 tones test signals, P at 60 MHz, Q at 65 MHz, separately applied at OUT port at 120 dBμV			

OUTDOOR RF PASSIVES / 40-SERIES

BLOCK DIAGRAM AND PICTURE GALLERY



ORDERING INFORMATION

4OSP402-xx	2-way splitter, 1.8 GHz
4OSP603-xx	3-way splitter, 1.8 GHz
4OSP803-xx	3-way splitter unbalanced, 1.8 GHz
4OSP804-xx	4-way splitter, 1.8 GHz
40DC101-xx	1-way tap, 10 dB, 1.8 GHz
40DC171-xx	1-way tap, 17 dB, 1.8 GHz
40DC132-xx	2-way tap, 13 dB, 1.8 GHz
40AC15A-xx	Power Inserter 15A
AD-041L	KS test probe long F female-5/8", att. 20dB
AD-041L-Z	KS test probe long F female-5/8", att. 20dB, 1.5x turns of screw-thread

xx = 5/8" or PG11 connector configuration

Configuration examples:

- Ordering of 5/8" connector configuration is denoted as follows: 4OSP402-5/8
- Ordering of PG11 connector configuration is denoted as follows: 4OSP402-PG11

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www.teleste.com

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