

Outdoor RF passives

3M-SERIES SPLITTERS, TAPS AND POWER INSERTERS

3M-series consists of splitters, taps and power inserters. The products have frequency range up to 1218 MHz and remote power feed up to 12 A. They are available with PG11 connectors (5/8 versions available on request).

3M-series features

- Frequency range up to 1218 MHz
- High performance
- Intended for use in branch and distribution networks
- Remote power feed up to 12 A
- Remote power switchable per port with jumpers
- PG11 connectors (5/8 versions also available)

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

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OUTDOOR RF PASSIVES / 3M-SERIES

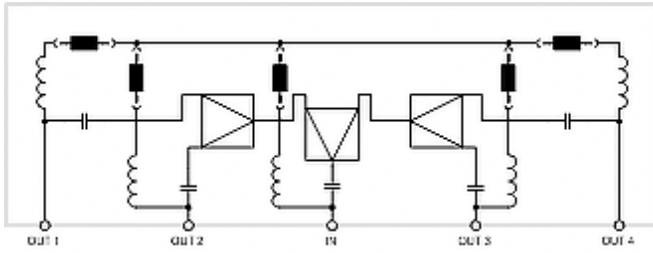
ELECTRICAL SPECIFICATIONS - FIXED SPLITTERS								
2-way 3MSP402			3-way balanced 3MSP603		3-way 3MSP803		4-way 3MSP804	
Insertion Loss (dB) - In to Out								
Frequency (MHz)	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.
5 - 15	3.7	4.2	6.0	6.5	3.7 / 4.2	7.3 / 7.8	7.3	7.8
15 - 47	3.5	4.0	6.0	6.5	3.5 / 4.0	7.1 / 7.6	7.1	7.6
47 - 470	3.5	4.0	6.3	6.8	3.5 / 4.0	7.3 / 7.8	7.3	7.8
470 - 862	4.0	4.5	6.7	7.2	4.2 / 4.7	7.8 / 8.3	7.8	9.3
862 - 1006	4.3	4.8	7.0	7.5	4.4 / 4.9	8.0 / 8.5	8.0	8.5
1006 - 1218	4.6	5.2	7.8	8.3	4.9 / 5.4	8.8 / 9.3	8.8	9.3
Isolation (dB, Min.) - Out to Out								
5 - 15	18.0		20.0		22.0		22.0	
15 - 47	28.0		28.0		28.0		28.0	
47 - 470	28.0		28.0		28.0		28.0	
470 - 862	25.0		25.0		25.0		25.0	
862 - 1006	22.0		22.0		22.0		22.0	
1006 - 1218	22.0		22.0		22.0		22.0	
Return loss (dB, Min.) - All ports								
5 - 15	16.0		16.0		16.0		16.0	
15 - 1218	18.0 ⁽¹⁾		18.0 ⁽¹⁾		18.0 ⁽¹⁾		18.0 ⁽¹⁾	
ELECTRICAL SPECIFICATIONS - FIXED TAPS								
1-way, 10dB 3MDC101			1-way, 17dB 3MDC171			2-way, 13dB 3MDC132		
Insertion Loss (dB) - In to Out								
Frequency (MHz)	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.
5 - 15	1.7	2.2	1.1	1.6	2.4	1.9	2.4	1.9
15 - 47	1.4	1.9	0.9	1.4	1.9	2.4	1.9	2.4
47 - 470	1.4	1.9	0.9	1.4	2.2	2.7	2.2	2.7
470 - 862	1.9	2.4	0.9	1.4	2.2	2.7	2.2	2.7
862 - 1006	2.2	2.7	1.0	1.5	2.4	2.9	2.4	2.9
1006 - 1218	3.0	3.5	1.4	1.9	3.0	3.5	3.0	3.5
Insertion Loss (dB, Max.) - In to Tap								
5 - 15	10.5	11.0	17.3	17.8	13.3	13.8	13.3	13.8
15 - 47	10.3	10.8	16.8	17.3	12.8	13.3	12.8	13.3
47 - 470	10.3	10.8	16.8	17.3	12.8	13.3	12.8	13.3
470 - 862	12.5	11.0	16.8	17.3	13.0	13.5	13.0	13.5
862 - 1006	10.5	11.0	16.8	17.3	13.2	13.7	13.2	13.7
1006 - 1218	10.5	11.0	17.3	17.8	13.5	14.0	13.5	14.0
Isolation (dB, Min.) - Out to Tap								
5 - 15	22.0		22.0		22.0		22.0	
15 - 47	28.0		30.0		28.0		28.0	
47 - 470	28.0		30.0		28.0		28.0	
470 - 862	25.0		28.0		25.0		25.0	
862 - 1006	25.0		25.0		25.0		25.0	
1006 - 1218	22.0		22.0		22.0		22.0	
Isolation (dB, Min.) - Tap to Tap								
5 - 15	-		-		30.0		30.0	
15 - 47	-		-		35.0		35.0	
47 - 470	-		-		35.0		35.0	
470 - 862	-		-		35.0		35.0	
862 - 1006	-		-		30.0		30.0	
1006 - 1218	-		-		30.0		30.0	
Return loss (dB, Min.) - All ports								
5 - 15	16.0		13.0		12.0		12.0	
15 - 1218	18.0 ⁽¹⁾		18.0 ⁽¹⁾		18.0 ⁽¹⁾		18.0 ⁽¹⁾	

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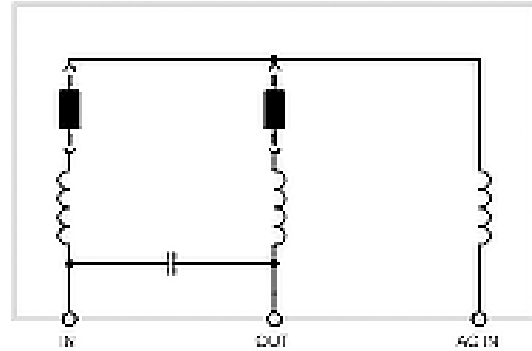
ELECTRICAL SPECIFICATIONS - POWER INSERTER			
3MAC15A			
Insertion Loss (dB) - In to Out			
Frequency (MHz)	Typ.	Max.	
5 - 15	0.5	1.0	
15 - 47	0.3	0.9	
47 - 470	0.4	0.9	
470 - 862	0.7	1.0	
862 - 1006	0.8	1.2	
1006 - 1218	1.0	1.5	
Isolation (dB, Min.) - RF to AC			
5 - 47	70.0		
47 - 470	70.0		
470 - 862	65.0		
862 - 1218	60.0		
Return loss (db, Min.) - All ports			
5 - 15	14.0		
15 - 1218	18.0 ⁽¹⁾		
GENERAL SPECIFICATIONS - ALL MODELS OF 3M-SERIES			
Nominal Impedance	75 Ohm	Frequency Range (MHz)	5-1218 MHz
Operating Temperature Range	-40 C° to +55 C°	Output connectors	PG11 or 5/8 "
Protection	IP66	Surge Immunity Test ⁽³⁾ Each port (Min.)	1 kV
Hum Splitter and taps 8A@65VAC		Hum Power Inserter 12A@65VAC	
5 - 15	60 dBc	5 - 15	55 dBc
15 - 1006	70 dBc	15 - 1006	65 dBc
1006 - 1218	60 dBc	1006 - 1218	55 dBc
EMC Compatibility	EN50083-2, Class A		
Nominal Current ⁽²⁾	Power Inserter Splitters and Taps	15A @ 65 VAC 12A @ 65 VAC	
Dimensions (h x w x d)		Weight	
3-port mechanics	110 mm x 155 mm x 64 mm	3-port mechanics	0.6 kg
4-port mechanics	115 mm x 172 mm x 64 mm	4-port mechanics	0.7 kg
5-port mechanics	115 mm x 195 mm x 64 mm	5-port mechanics	0.8 kg
NOTES			
(1) At F≥40 MHz -1.5 dB per octave, with a minimum of 15 dB.			
(2) For Splitters and Taps: Hum modulation -60 dB/port. For Power Inserter: Input/output of either port or total output of two ports. Hum modulation -60 dB/port.			
(3) 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.			
BLOCK DIAGRAMS			
3MSP402, 3MDC101, 3MDC171		3MSP603, 3MSP803, 3MDC132	

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BLOCK DIAGRAM



3MSP804



3MAC15A

ORDERING INFORMATION

3MSP402-xx	2-way splitter, 5-1218 MHz
3MSP603-xx	3-way splitter, balanced, 5-1218 MHz
3MSP803-xx	3-way splitter, 5-1218 MHz
3MSP804-xx	4-way splitter, 5-1218 MHz

3MDC101-xx	1-way tap, 10 dB, 5-1218 MHz
3MDC171-xx	1-way tap, 17 dB, 5-1218 MHz
3MDC132-xx	2-way tap, 13 dB, 5-1218 MHz

3MAC15A-xx	Power Inserter, 5-1218 MHz
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xx = 5/8" or PG11 connector configuration

Configuration examples:

- Ordering of 5/8" connector configuration is denoted as follows: 3MSP402-5/8
- Ordering of PG11 connector configuration is denoted as follows: 3MSP402-PG11

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TELESTE CORPORATION

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