

4T4R

Small size

Low PIM

High power handling

Triplexer – n1 n3 n7

Product number: ZEN – 500 – 500 – 02

TX Band n1 and n3	Frequency Range [MHz]	Requirement
Passband n1	2110 – 2170	
Passband n3	1805 – 1880	
Insertion Loss n1 Max 5 MHz average	1805 – 1810 & 1875 – 1880	< 1.4 dB
Insertion Loss n1 Mid-band 5 MHz average	1810 – 1875	< 1.2 dB
Insertion Loss n3 Max 5 MHz average	2110 – 2115 & 2165 – 2170	< 1.9 dB
Insertion Loss n3 Mid-band 5 MHz average	2115 – 2165	< 1.4 dB
Rejection	0 – 1785	> 100 dB
Rejection	1920 – 1980	> 100 dB
Rejection	2480 – 2570	> 115 dB
Rejection	2570 – 4000	> 100 dB
Rejection up to 12750 MHz		
All requirements not in this table. Full specification on request		

TX Band n7	Frequency Range [MHz]	Requirement
Passband n7	2620 – 2690	
Insertion Loss n7 Max 5 MHz average	2620 – 2625 & 2685 – 2690	< 2.2 dB
Insertion Loss n7 Mid-band 5 MHz average	2625 – 2685	< 1.3 dB
Rejection	0 – 2570	> 105 dB
Rejection	2570 – 2615	> 48 dB
Rejection	2700 – 2705	> 20 dB
Rejection	2705 – 3000	> 35 dB
Rejection up to 12750 MHz		
All requirements not in this table. Full specification on request		



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RX Band n1 and n3	Frequency Range [MHz]	Requirement
Passband n1	1920 – 1980	
Passband n3	1710 – 1785	
Insertion Loss n1 Max 5 MHz average	1920 – 1925 & 1975 – 1980	< 1.6 dB
Insertion Loss n1 Mid-band 5 MHz average	1925 – 1975	< 1.4 dB
Insertion Loss n3 Max 5 MHz average	1710 – 1715 & 1780 – 1785	< 1.9 dB
Insertion Loss n3 Mid-band 5 MHz average	1715 – 1780	< 1.3 dB
Rejection	0 – 1518	> 75 dB
Rejection	1805 – 1880	> 80 dB
Rejection	2110 – 2170	> 80 dB
Rejection up to 5925 MHz		
All requirements not in this table. Full specification on request		

RX Band n7	Frequency Range [MHz]	Requirement
Passband n7	2500 – 2570	
Insertion Loss n7 Max 5 MHz average	2500 – 2505 & 2565 – 2570	< 2.2 dB
Insertion Loss n7 Mid-band 5 MHz average	2505 – 2565	< 1.3 dB
Rejection	0 – 1880	> 95 dB
Rejection	1880 – 2170	> 85 dB
Rejection	2465 – 2483	> 11 dB
Rejection	2620 – 2690	> 80 dB
Rejection up to 5925 MHz		
All requirements not in this table. Full specification on request		

Return Loss	
Band	Requirement
n1 TX	> 17 dB
n3 TX	> 17 dB
n7 TX	> 17 dB
n1 RX	> 17 dB
n3 RX	> 17 dB
n7 RX	> 17 dB



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Passive Intermodulation with Input power 2x43 dBm			
TX band	PIM product	Frequency range PIM product	PIM requirement
n1 (2110 - 2170 MHz)	IM7	n1 RX-In band	< -105 dBm
n3 (1805 - 1880 MHz)	IM3	n1 RX-In band n3 RX-In band	< -117 dBm
n7 (2620 - 2690 MHz)	IM3	n7 RX-In band	< -117 dBm
n3 (1805 - 1880 MHz) n1 (2110 - 2170 MHz)	IM3	n7 RX-In band	< -117 dBm

Output power	
n1 (2110 - 2170 MHz)	80 W
n3 (1805 - 1880 MHz)	80 W
n7 (2620 - 2690 MHz)	50 W
Peak Average Ratio (PAR)	8 dB
Signal Bandwidth	10 MHz
Load mismatch	8 dB

Mechanical	
Dimensions (including connectors)	449 x 422 x 38 mm
Connectors antenna	4.3-10 (f)
Connectors TX in	SMP
Connectors RX out	SMP

Environmental	
Temperature range	-20 °C to +125 °C
Ingress Protection (RRU assembly)	IP67
Air pressure	70 kPa



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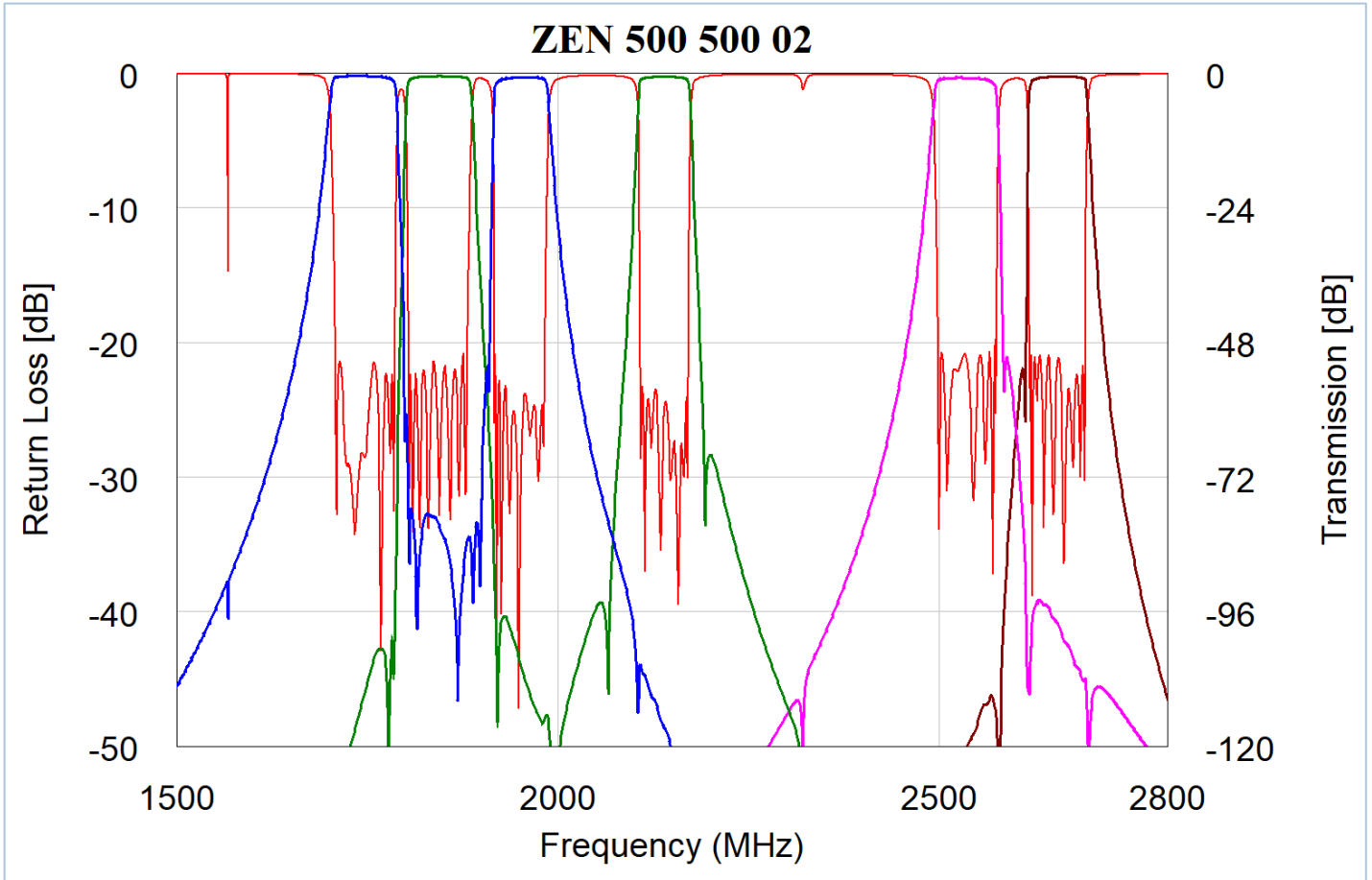
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