	Customer		Revision	1.0
	Part Number	MCC4-000012A1 (B3+B8)	Date	8/7/19
	Item Name	1800/900MHz quadruplexer		

1. Specifications

1.1. Electrical

Parameter		Specification
1747.5M (Band-3)	Operating Band	1710.0 ~ 1785.0MHz
	Insertion Loss	1.5dB Max
	Return Loss (VSWR)	17.7dB Min (1.3:1 Max)
	Attenuation	1805.0 ~ 1880.0MHz @75.0dB Min
1842.5M (Band-3)	Operating Band	1805.0 ~ 1880.0MHz
	Insertion Loss	1.5dB Max.
	Return Loss (VSWR)	17.7dB Min (1.3:1 Max)
	Attenuation	1710.0 ~ 1785.0MHz @75.0dB Min
897.5M (Band-8)	Operating Band	880.0 ~ 915.0MHz
	Insertion Loss	1.5dB Max
	Return Loss (VSWR)	17.7dB Min (1.3:1 Max)
	Attenuation	925.0 ~ 960.0MHz @75.0dB Min
942.5M (Band-8)	Operating Band	925.0 ~ 960.0MHz
	Insertion Loss	1.5dB Max.
	Return Loss (VSWR)	17.7dB Min (1.3:1 Max)
	Attenuation	880.0 ~ 915.0MHz @75.0dB Min
Common	Power	50.0W. Max
	Operating Temperature	+10.0 ~ +30.0°C
	Impedance	50Ω

1.2. Mechanical

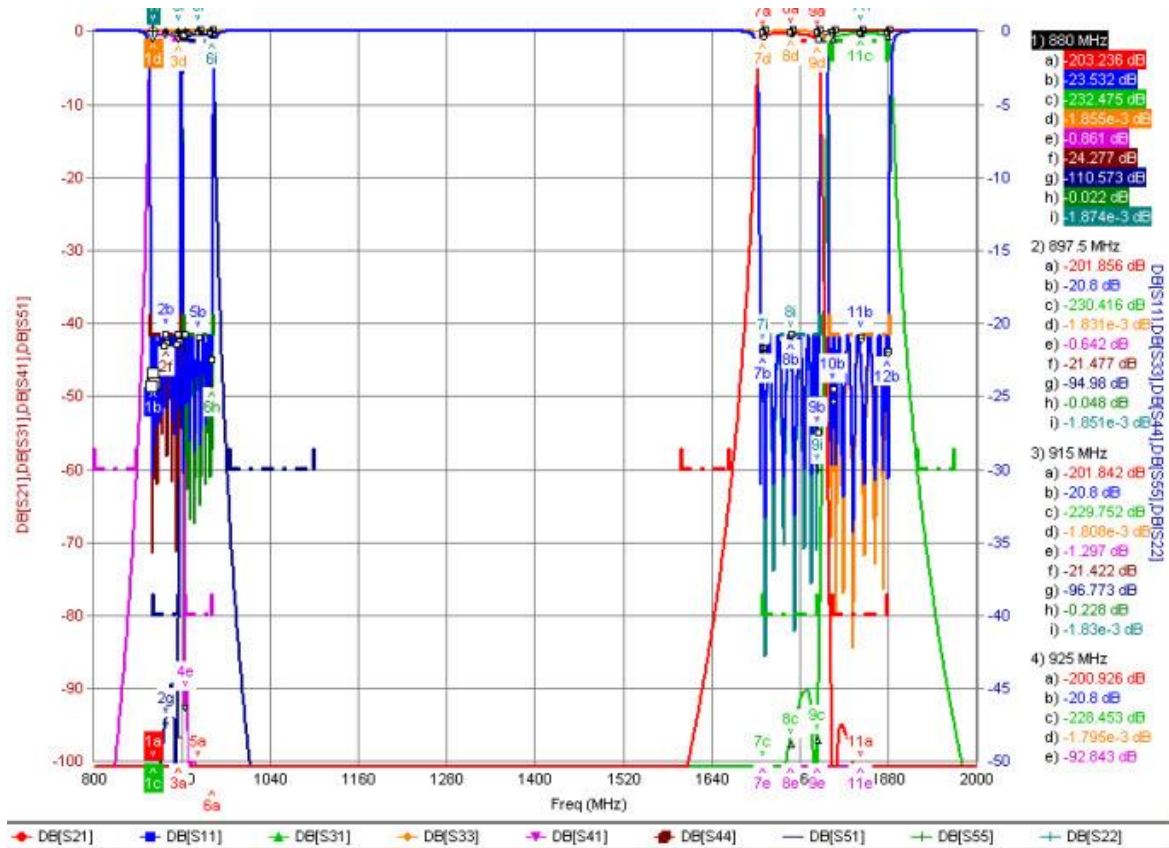
Parameter	Specification
Dimension(WxDxH)	166 x 112 x 88 (100 max) mm ±1.0mm
Weight	-
Mounting Points	See Outline Drawing
RF Connector	All Ports: Passivity/Au Plate SMA(F)
Finish	BLACK
Connector Position	See Outline Drawing



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2. Simulation

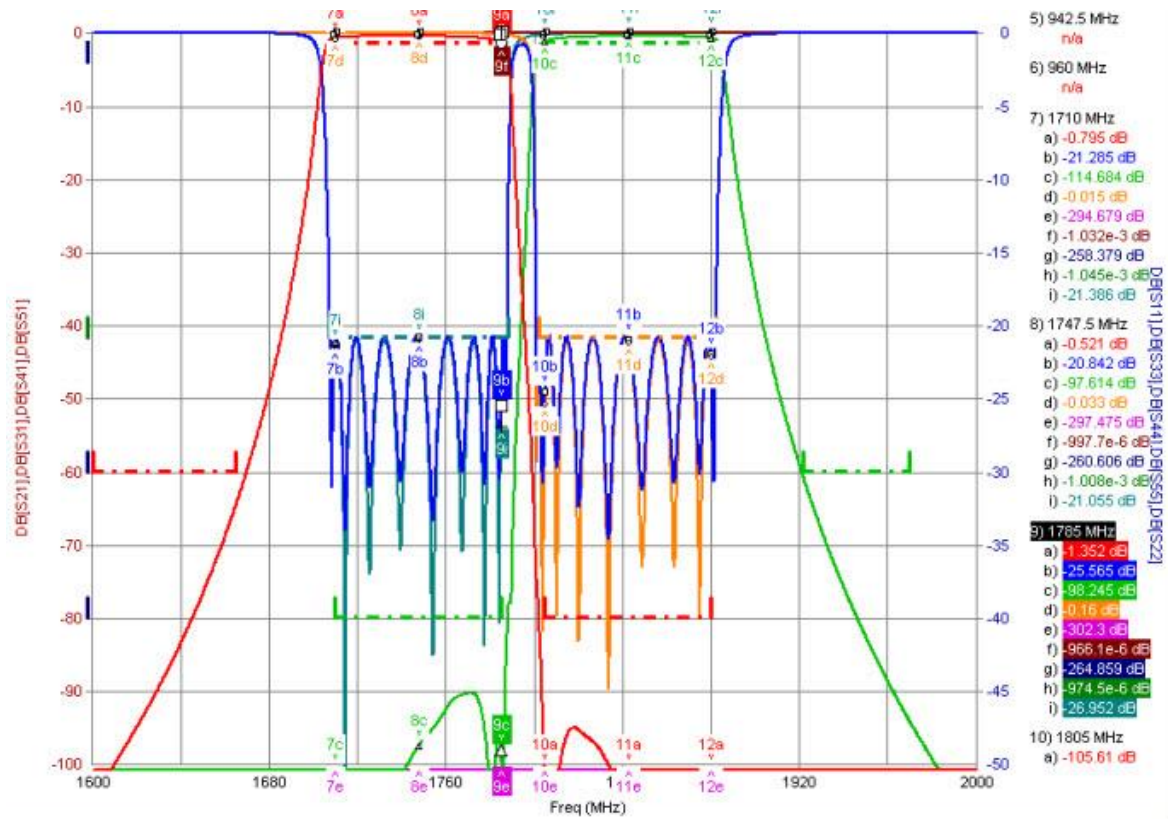
2.1. IL, RL & Attenuation_full range



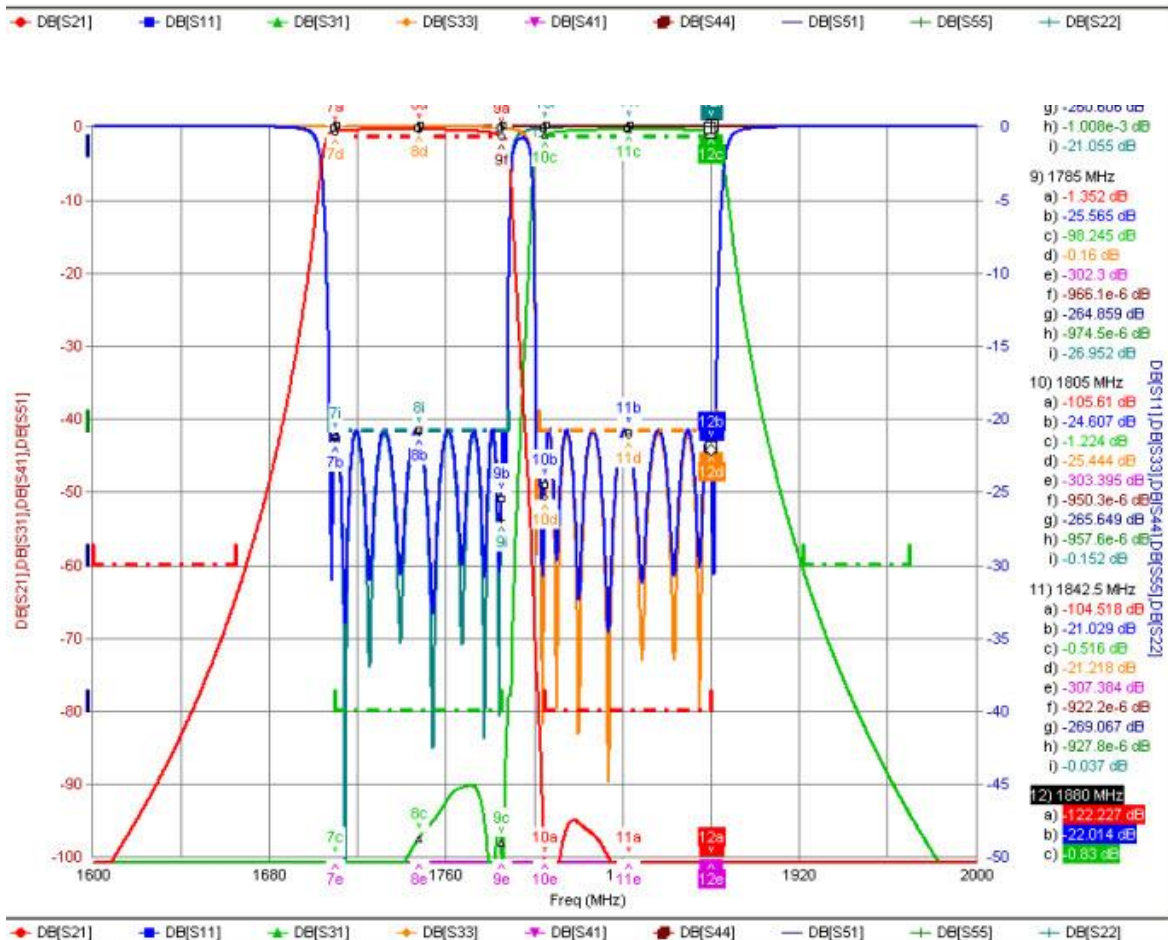


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2.2. IL, RL & Attenuation_1800MHz



- 5) 942.5 MHz
n/a
- 6) 960 MHz
n/a
- 7) 1710 MHz
a) -0.795 dB
b) -21.285 dB
c) -114.684 dB
d) -0.015 dB
e) -294.679 dB
f) -1.032e-3 dB
g) -258.379 dB
h) -1.045e-3 dB
i) -21.386 dB
- 8) 1747.5 MHz
a) -0.521 dB
b) -20.842 dB
c) -97.614 dB
d) -0.033 dB
e) -297.475 dB
f) -997.7e-6 dB
g) -260.606 dB
h) -1.008e-3 dB
i) -21.055 dB
- 9) 1785 MHz
a) -1.352 dB
b) -25.565 dB
c) -98.245 dB
d) -0.16 dB
e) -302.3 dB
f) -966.1e-6 dB
g) -264.859 dB
h) -974.5e-6 dB
i) -26.952 dB
- 10) 1805 MHz
a) -105.61 dB

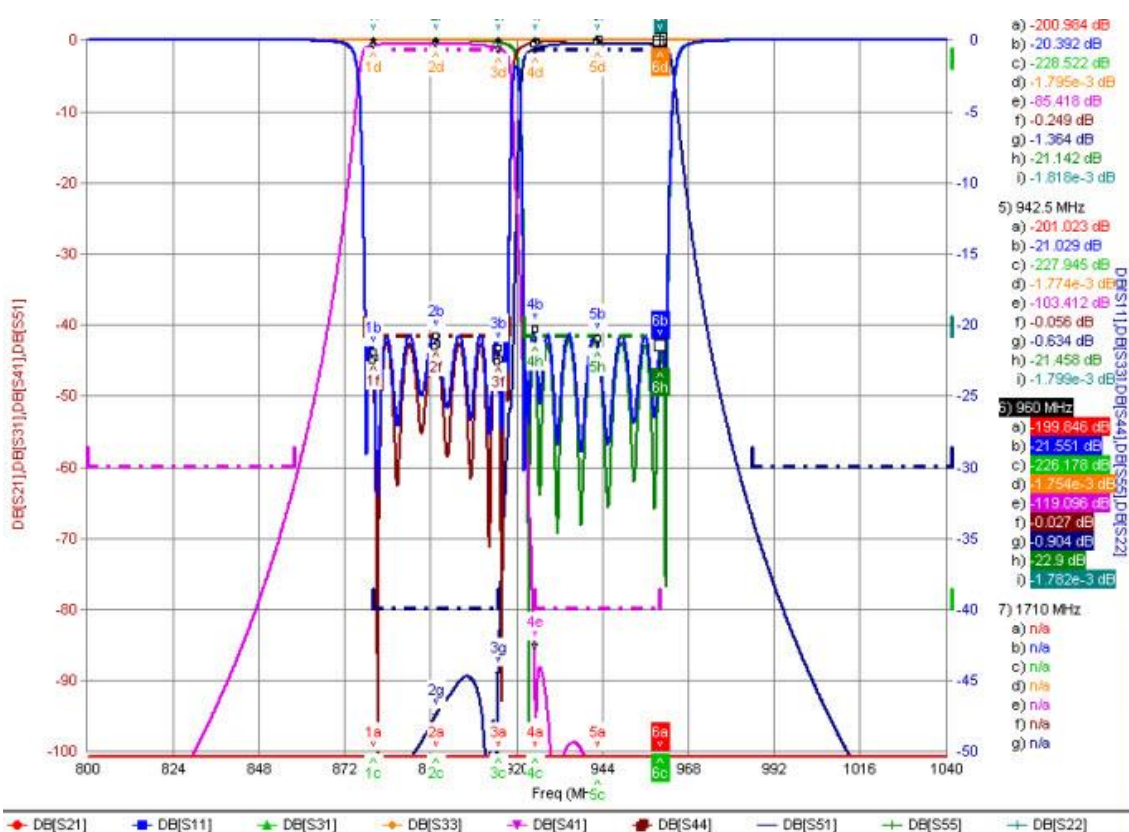
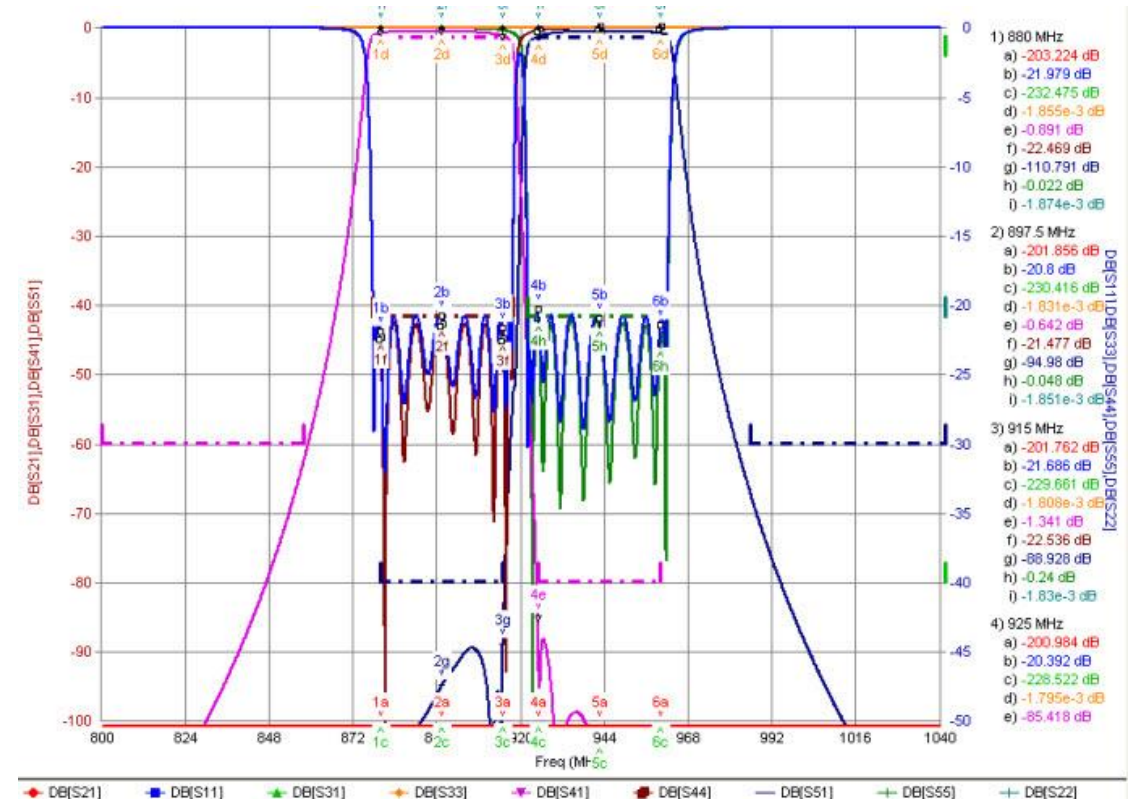



- g) -200.000 dB
h) -1.000e-3 dB
i) -21.055 dB
- 9) 1785 MHz
a) -1.352 dB
b) -25.565 dB
c) -98.245 dB
d) -0.16 dB
e) -302.3 dB
f) -966.1e-6 dB
g) -264.859 dB
h) -974.5e-6 dB
i) -26.952 dB
- 10) 1805 MHz
a) -105.61 dB
b) -24.607 dB
c) -1.224 dB
d) -25.444 dB
e) -303.395 dB
f) -950.3e-6 dB
g) -265.649 dB
h) -957.6e-6 dB
i) -0.152 dB
- 11) 1842.5 MHz
a) -104.518 dB
b) -21.029 dB
c) -0.516 dB
d) -21.218 dB
e) -307.384 dB
f) -922.2e-6 dB
g) -269.067 dB
h) -927.8e-6 dB
i) -0.037 dB
- 12) 1880 MHz
a) -122.227 dB
b) -22.014 dB
c) -0.83 dB



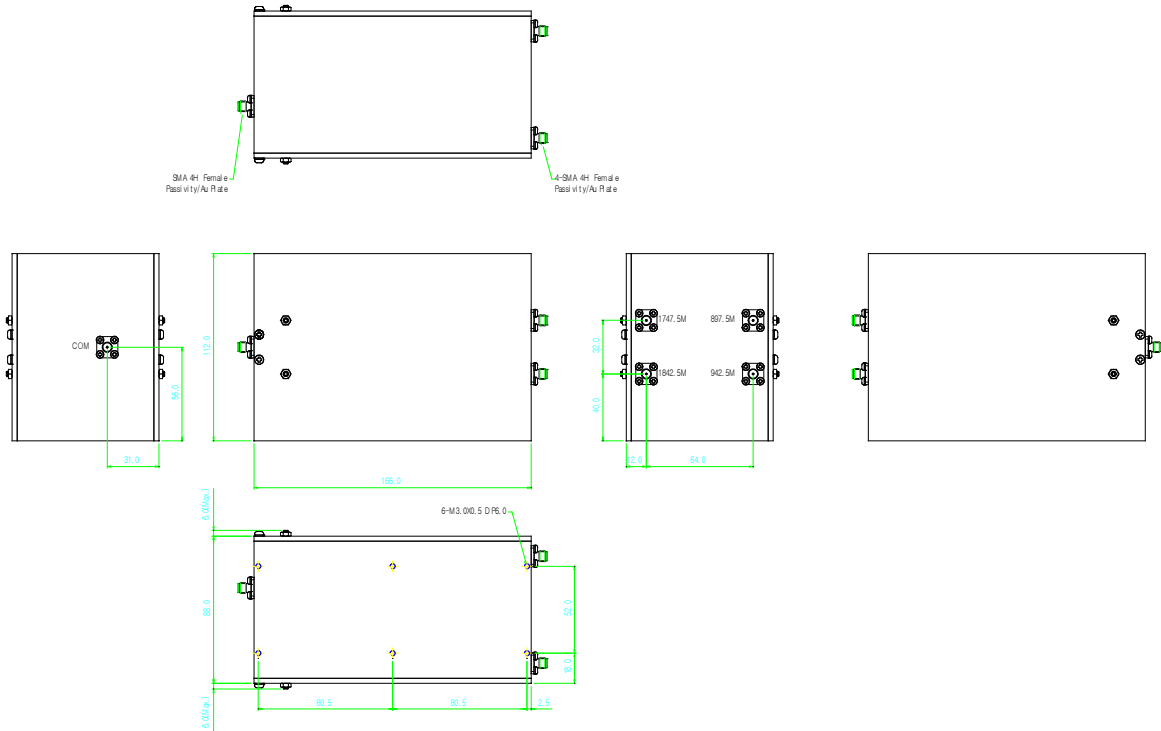
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2.3. IL, RL & Attenuation_900MHz



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3. Outline



Notes:

1. unit: mm
2. Black acrylic urethane paint