

MR456(X)-1-(Y) Duplexer, 6 cavity mobile, 9/24/45 MHz separation, 806-960 MHz

- Six highly stable temperature compensated helical resonators
- Enclosure made of lightweight and rugged aluminum extrusion
- 50 Watts power handling with 60 dB Tx to Rx isolation

Sinclair's MR456 series of mobile duplexers are compact units, fabricated from lightweight, rugged aluminum extrusion, which affords maximum structural integrity. Carefully temperature-compensated resonators are designed to minimize variations due to changing operating environments. These duplexers provide superior performance for trunking and conventional applications, and may also be used as low-power base station duplexers.

When ordering, please refer to the chart below for the model number, and also specify the Tx and Rx frequencies. Different connector configurations are subject to various list price. Customization is also available. Please contact your Sinclair Sales Representative or Customer Service Representative for more information.



N Connector model shown.

Part Number	Connector	Frequency Sep.	Insertion Loss
		MHz	dB (max)
MR456B-1-1	BNC(f)	45	1
MR456B-1-2	BNC(f)	24	1
MR456B-1-3	BNC(f)	9	2
MR456N-1-1	N(f)	45	1
MR456N-1-2	N(f)	24	1
MR456N-1-3	N(f)	9	2
MR456T-1-1	TNC(f)	45	1
MR456T-1-2	TNC(f)	24	1
MR456T-1-3	TNC(f)	9	2

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Product Specification Sheet		MR456(X)-1-(Y)	Issue: 1	Dated: 02-10-20

#### Electrical Specifications

Frequency Range	MHz	806 to 960	
Number of Cavities - Low Pass Side		3	
Number of Cavities - High Pass Side		3	
Connectors		Various	*1
Input VSWR (max)		1.5:1	
Insertion loss (max)	dB	2	*2
Impedance	Ω	50	
Isolation - Tx noise suppression at Rx (min)	dB	60	
Isolation - Rx carrier suppression at Tx (min)	dB	60	
Average Input Power (max)	W	50	*3
Frequency separation range	MHz	9/24/45	*4

#### Mechanical Specifications

Width	in (mm)	6.25 (159)
Depth	in (mm)	5.8 (147)
Length/ Height	in (mm)	1.31 (33)
Weight	lbs (kg)	1.8 (0.82)
Actual shipping weight	lbs (kg)	2 (0.91)
Shipping dimensions	in (mm)	9x6x3 (229x152x76)

#### Environmental Specifications

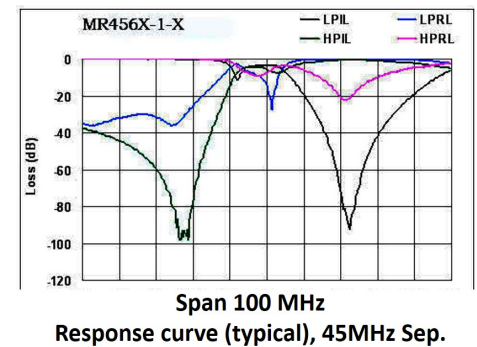
Temperature range	°F (°C)	-22 to +140 (-30 to +60)
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#### Notes

- \*1 : See previous page for details.
- \*2 : 1 dB at 24 and 45 MHz spacing; 2 dB at 9 MHz spacing.
- \*3 : 40 watts for base station usage scenario
- \*4 : See previous page for details.

#### Ordering Information

Specify Tx and Rx frequencies when ordering.



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