

MR454 SERIES Duplexer, 4 cavity mobile, 24 or 45 MHz separation, 806-960 MHz

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

Sinclair's MR454 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.



BNC connector model shown.

Part Number	Connector	Frequency Separation
MR454B-1-1	BNC(f)	45 MHz
MR454B-1-2	BNC(f)	24 MHz
MR454N-1-1	N(f)	45 MHz
MR454N-1-2	N(f)	24 MHz
MR454T-1-1	TNC(f)	45 MHz
MR454T-1-2	TNC(f)	24 MHz

www.sincltech.com

Region	United States	Europe, Middle East, and Africa	Canada, Caribbean, and Latin America	Asia-Pacific
Telephone	1 800 263 3275	+44 (0) 1487 84 28 19	Canada: 1 800 263 3275 International: +1 905 726 7676	+1 905 727 0165
E-mail	salesusa@sincltech.com	salesuk@sincltech.com	salescan@sincltech.com	salesasia@sincltech.com
Product Specification Sheet		MR454 SERIES	Issue: 1	Dated: 02-10-20

Electrical Specifications

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

Mechanical Specifications

Width	in (mm)	4.1 (104)
Depth	in (mm)	5.75 (146)
Length/ Height	in (mm)	1.25 (32)
Finish		chemical conversion
Weight	lbs (kg)	1.6 (0.73)
Actual shipping weight	lbs (kg)	1.6 (0.73)
Shipping dimensions	in (mm)	9x6x2.5 (229x152x64)

Environmental Specifications

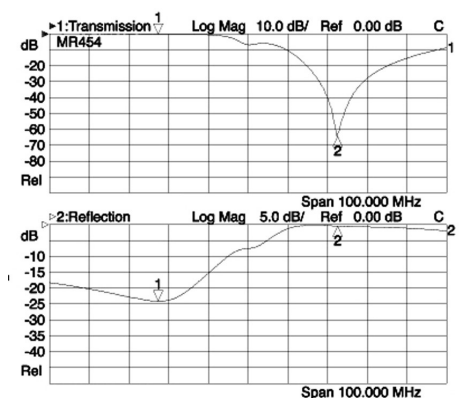
Temperature range	°F (°C)	-22 to +140 (-30 to +60)
-------------------	---------	--------------------------

Notes

- *1 : See previous page for details
- *2 : 40 watts for base station usage scenario

Ordering Information

Specify Tx and Rx frequencies when ordering.



Response curve (typical), 45MHz Sep.

Region	United States	Europe, Middle East, and Africa	Canada, Caribbean, and Latin America	Asia-Pacific
Telephone	1 800 263 3275	+44 (0) 1487 84 28 19	Canada: 1 800 263 3275 International: +1 905 726 7676	+1 905 727 0165
E-mail	salesusa@sinctech.com	salesuk@sinctech.com	salescan@sinctech.com	salesasia@sinctech.com
Product Specification Sheet		MR454 SERIES	Issue: 1	Dated: 02-10-20