

Duplexers Low Band, Aviation, and VHF Duplexers Q2220 Series

## Q2220E Duplexer, Q-Circuit, Res-Lok, 4 cavity, rack mount, 138-174 MHz

- Four cavity duplexer with 70 dB of isolation
- Only 1.5 dB insertion loss at 500 KHz separation
- Isolation of 80 dB at 3 MHz spacing typical

Sinclair developed the Q2220E design coupled with our Res-Lok<sup>™</sup> modular construction resulting in an extremely versatile duplexer offering exceptional performance. The Q2220E design provides a quasi-bandpass response, resulting in suppression of spurious and sideband transmitter noise between and adjacent to the duplex frequencies. Coupled with carefully temperature compensated components this series of duplexers ensures performance stability at very low frequency separations and insertion loss values.



## **Application Notes**

• Res-Lok<sup>™</sup> modular construction offers a variety of mounting options. The multi position brackets supplied with each duplexer allow easy rack, wall or floor mounting to suit system and equipment room limitations. A variety of system-specific configurations is available in the 138-174 MHz frequency range.

Region	United States	Europe, Middle East and Africa	Caribbean and Latin America	Canada and rest of the world
Telephone	USA: 1 800 263 3275	International: +44 (0) 1487 84 28 19	International: +1 905 726 7676	Canada: 1 800 263 3275 International: +1 905 727 0165
E-mail	salesusa@sinctech.com	salesuk@sinctech.com	salesla@sinctech.com	salescan@sinctech.com
Product Specification Sheet		Q2220E	Issue: 106	Dated: 18-10-16
Customer Tech Manual 005658		Sinclair's commitment to product leadership may result in	improvement or change to this product	



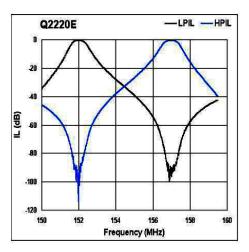
Frequency Range	MHz 138 to 174		
Number of Cavities - Tx Side		2	
Number of Cavities - Rx Side		2	
Input VSWR (max)		1.5:1	
Impedance	Ω	50	
Average Power Input (max)	W	350	
Input Connectors		N-Female	
Output Connectors		N-Female	
Frequency separation (min)	MHz	0.5	
Insertion Loss (max) Tx to Ant	dB	1.5	
Isolation (min)	dB	70	

## **Mechanical Specifications**

Width	in (mm)	19 (483)
Depth	in (mm)	30.3 (770)
Length/ Height	in (mm)	4.17 (106)
Finish		chromate conversion
Weight	lbs (kg)	28 (12.71)
Actual shipping weight	lbs (kg)	33 (14.98)
Shipping dimensions	in (mm)	19.25x7x30.5 (489x178x775)
Mounting configurations		19 inch rack

## **Environmental Specifications**

 Temperature range
 °F (°C)
 -40 to +140 (-40 to +60)



Region	United States	Europe, Middle East and Africa	Caribbean and Latin America	Canada and rest of the world
Telephone	USA: 1 800 263 3275	International: +44 (0) 1487 84 28 19	International: +1 905 726 7676	Canada: 1 800 263 3275 International: +1 905 727 0165
E-mail	salesusa@sinctech.com	salesuk@sinctech.com	salesla@sinctech.com	salescan@sinctech.com
Product Specification Sheet		Q2220E	Issue: 106	Dated: 18-10-16
Customer Tech Manual 005658		Sinclair's commitment to product leadership may result in improvement or change to this product		

Sinclair's commitment to product leadership may result in improvement or change to this product Copyright © Sinclair Technologies