

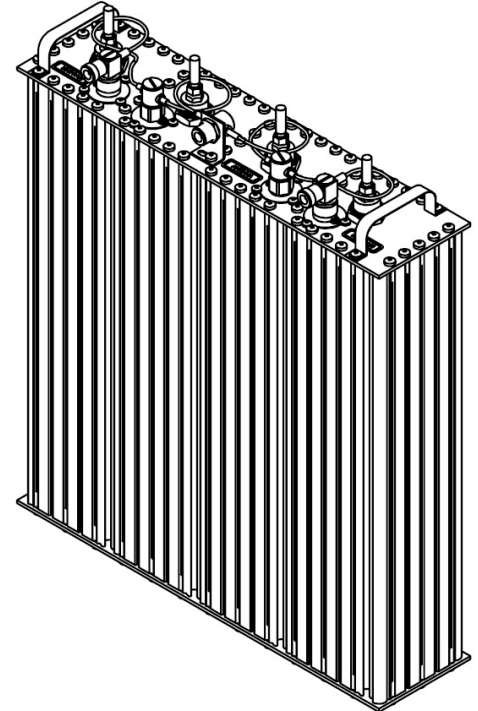
Q2221E Duplexer, Q-Circuit, Res-Lok, 4 cavity, rack mount, 220-225 MHz

- Four cavity duplexer with 70 dB of isolation and only 1.5 dB insertion loss
- 350 W power rating
- Variety of mounting options available

Sinclair developed Q-Circuit design coupled with our Res-Lok™ modular construction to result in a series of extremely versatile duplexers offering exceptional performance. The Q-Circuit 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.

Res-Lok™ 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 220-225 MHz frequency range.

Q2221E is ideal for allowing one pair of Tx/Rx frequency sharing a common antenna, especially for the narrow band LMR/PMR systems (12.5 or 25 KHz CH). For multiple Tx/Rx frequencies applications, wider bandwidth duplexers are available. Please contact your Sinclair Sales Representatives for details.



Region	United States	Europe, Middle East, and Africa	Canada, Caribbean, and Latin America	Asia-Pacific
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Electrical Specifications

Tx Frequency Range	MHz	220 to 225	
Rx Frequency Range	MHz	220 to 225	
Number of Cavities - Tx Side		2	
Number of Cavities - Rx Side		2	
Input Connectors		N (female)	
Output Connectors		N (female)	
Input VSWR (max)		1.5:1	
Insertion loss (max) Tx to Ant	dB	1.5	*1
Insertion loss (max) Rx to Ant	dB	1.5	*2
Impedance	Ω	50	
Isolation - Tx noise suppression at Rx (min)	dB	70	
Isolation - Rx carrier suppression at Tx (min)	dB	70	
Average Input Power (max)	W	350	
Frequency separation (min)	MHz	0.5	

Notes

- *1 : 2.2dB when Tx-Rx separation is 0.5-1 MHz; 1.5dB when Tx-Rx separation is >=1MHz.
 *2 : 2.2dB when Tx-Rx separation is 0.5-1 MHz; 1.5dB when Tx-Rx separation is >=1MHz.

Mechanical Specifications

Width	in (mm)	19 (483)
Depth	in (mm)	23.3 (592)
Length/ Height	in (mm)	4.17 (106)
Finish		chromate conversion
Mounting configurations		19 inch rack
Actual shipping weight	lbs (kg)	33 (14.98)
Shipping dimensions	in (mm)	19.25x7x23.5 (489x178x597)

Environmental Specifications

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