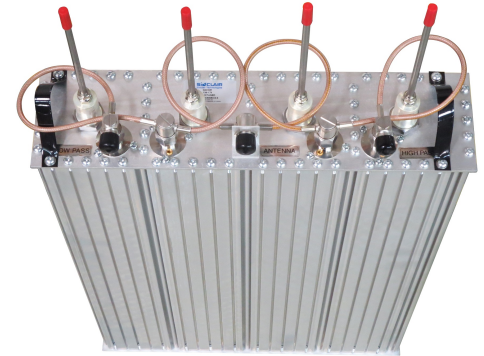


**Q2220E Duplexer, Q-Circuit, Res-Lok, 4 cavity, rack mount, 138-174 MHz**

- 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™ 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.

Q2220E 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.



**Application Notes**

- 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 138-174 MHz frequency range.

www.sinctech.com

| Region           | United States         | Europe, Middle East, and Africa | Canada, Caribbean, and Latin America                     | Asia-Pacific           |
|------------------|-----------------------|---------------------------------|--|------------------------|
| <b>Telephone</b> | 1 800 263 3275        | +44 (0) 1487 84 28 19           | Canada: 1 800 263 3275<br>International: +1 905 726 7676 | +1 905 727 0165        |
| <b>E-mail</b>    | salesusa@sinctech.com | salesuk@sinctech.com            | salescan@sinctech.com                                    | salesasia@sinctech.com |

Product Specification Sheet  
EPR 017481  
Customer Tech Manual 005658

Q2220E

Issue: 16

Dated: 24-01-22  
Dated: 12-12-18

### Electrical Specifications

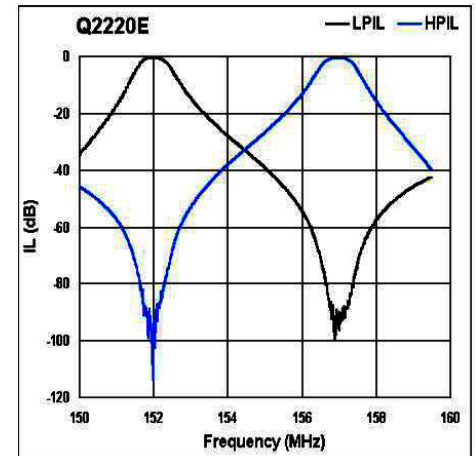
|                                |     |            |
|--------------------------------|-----|------------|
| Frequency Range                | MHz | 138 to 174 |
| Number of Cavities - Tx Side   |     | 2          |
| Number of Cavities - Rx Side   |     | 2          |
| Input Connectors               |     | N-Female   |
| Output Connectors              |     | N-Female   |
| Input VSWR (max)               |     | 1.5:1      |
| Insertion Loss (max) Tx to Ant | dB  | 1.5        |
| Impedance                      | Ω   | 50         |
| Average Input Power (max)      | W   | 350        |
| Frequency separation (min)     | MHz | 0.5        |
| 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)                 |
| Mounting configurations |          | 19 inch rack               |
| Actual shipping weight  | lbs (kg) | 33 (14.98)                 |
| Shipping dimensions     | in (mm)  | 19.25x7x30.5 (489x178x775) |

### Environmental Specifications

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



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