

Q301GC-2 Duplexer, base station, Q-Circuit, Cabinet mounted, 450-470 MHz

- High attenuation at extremely close frequency spacings in 450-470 MHz band
- Quasi bandpass response suppresses spurious and side-band transmitter noise
- Available in either rack mount or cabinet enclosure

The Q-301G base station duplexer utilizes Sinclair's Q-circuit design in a 6-cavity configuration to provide very high attenuation at extremely close frequency separation in the 406-512 MHz band. This design provides a quasi-bandpass response, resulting in suppression of spurious and side-band transmitter noise between and adjacent to the duplex frequencies. The Q-302G is available in either rack-mounted, Q-301GR, or cabinet enclosed, Q-301GC, configuration.

Application Notes

- -1 is 406 to 420MHz
- -2 is 450 to 470MHz
- -3 is 470 to 512MHz
- -4 is 420 to 450MHz



| Region | United States | Europe, Middle East and Africa | Caribbean and Latin America | Canada and rest of the world |
|------------------|-----------------------|--------------------------------------|--------------------------------|--|
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Electrical Specifications

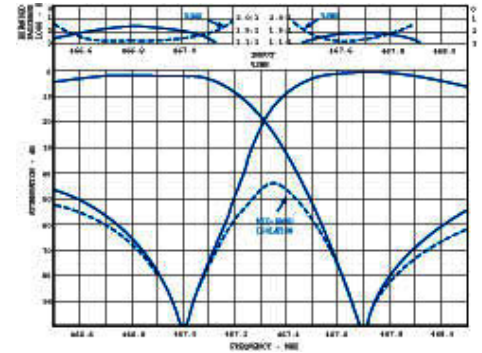
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|--|-----|------------|
| Frequency Range | MHz | 450 to 470 |
| Number of cavities Tx Side | | 3 |
| Number of Cavities Rx Side | | 3 |
| Input VSWR (max) | | 1.5:1 |
| Impedance | Ω | 50 |
| Isolation Rx carrier suppression at Tx (min) | dB | 100 |
| Isolation Tx noise suppression at Rx (min) | dB | 100 |
| Average Power Input (max) | W | 250 |
| Connectors | | N-Female |
| Frequency separation (min) | MHz | 0.7 |
| Insertion loss Rx to antenna (max) | dB | 2.2 |
| Insertion loss Tx to antenna (max) | dB | 2.2 |

Mechanical Specifications

| | | |
|-------------------------|----------|-------------------------|
| Depth | in (mm) | 17.2 (437) |
| Length/ Height | in (mm) | 40.4 (1026) |
| Width | in (mm) | 22 (559) |
| Weight | lbs (kg) | 110 (49.94) |
| Actual Shipping weight | lbs (kg) | 120 (54.48) |
| Shipping dimensions | in (mm) | 24x19x44 (610x483x1118) |
| Mounting configurations | | cabinet |

Environmental Specifications

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



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