

- Ideal for Wireless LAN applications
- Low-Loss, Coupled-Resonator Quartz Design
- Simple External Impedance Matching
- Ultra Miniature Ceramic QCC8C SMD Package

SF5404

| Absolute Maximum Rating (Ta=25°C) | | | | | | | |
|-------------------------------------|--------------|-----------|------|--|--|--|--|
| Parameter | | Rating | Unit | | | | |
| Source Power | Р | 10 | dBm | | | | |
| DC Voltage VDC Between Any Two Pins | $V_{ m DC}$ | 0 | V | | | | |
| Operating Temperature Range | T_{A} | -10 ~ +65 | °C | | | | |
| Storage Temperature Range | $T_{ m stg}$ | -40 ~ +85 | °C | | | | |

| Electronic Characteristics | | | | | | |
|--|-------------------------------------|------------------|---------|---------|---------|--------|
| Parameter | | Sym | Minimum | Typical | Maximum | Unit |
| Nominal Frequency (at 25°C) (Center frequency between 3dB point) | | $f_{\mathbb{C}}$ | NS | 374.00 | NS | MHz |
| Insertion Loss (including matching network) | | IL | - | 9.0 | 10.5 | dB |
| 3dB Passband | | BW ₃ | 17 | 22 | - | MHz |
| Amplitude Ripple (p-p) | $f_{\rm C}\pm7.0~{ m MHz}$ | Δα | - | ±0.5 | 1.0 | dB |
| Group Delay Ripple (p-p) | f _C ± 7.0 MHz | Δτ | - | 40 | 100 | ns |
| Relative Attenuation (relative to IL) | | | | | | |
| | 375.50 352.00 MHz | | 30 | 42 | - | dB |
| 352.00 341.00 MHz 341.00 224.00 MHz 390.50 392.00 MHz 392.00 396.00 MHz | | | 40 | 45 | - | dB |
| | | | 48 | 52 | - | dB |
| | | α_{rel} | 20 | 38 | - | dB |
| | | | 30 | 42 | - | dB |
| | 396.00 422.00 MHz | | 38 | 44 | - | dB |
| | 422.00 454.00 MHz | | 40 | 45 | - | dB |
| Temperature coefficient of frequency | | FTC | - | -87 | - | ppm/K |
| Frequency Aging Al | osolute Value during the First Year | fA | - | - | 10 | ppm/yr |
| DC Insulation Resistance Between any Two Pins | | - | 1.0 | - | - | MΩ |

NS = Not Specified

Notes:

- 1. The frequency $f_{\rm C}$ is defined as the midpoint between the 3dB frequencies.
- 2. Unless noted otherwise, all measurements are made with the filter installed in the specified test fixture that is connected to a 50Ω test system with VSWR ≤ 1.2:1. The test fixture L and C are adjusted for minimum insertion loss at the filter center frequency, f_C. Note that insertion loss, bandwidth, and passband shape are dependent on the impedance matching component values and quality.
- Unless noted otherwise, specifications apply over the entire specified operating temperature range.
- The specifications of this device are based on the test circuit shown above and subject to change or obsolescence without notice.
- All equipment designs utilizing this product must be approved by the appropriate government agency prior to manufacture or sale.
- Our liability is only assumed for the Surface Acoustic Wave (SAW) component(s) per se, not for applications, processes and circuits implemented within components or assemblies.
- 7. For questions on technology, prices and delivery please contact our sales offices or e-mail sales@vanlong.com.

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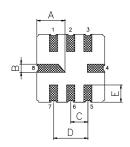
Fax: +86 10 6301 9167

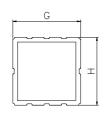
Email: sales@vanlong.com

Web: http://www.vanlong.com



Package Dimensions (QCC8C)







Electrical Connections

| Terminals | Connection | | | |
|-----------|----------------|--|--|--|
| 2 | Input Ground | | | |
| 3 | Input | | | |
| 6 | Output Ground | | | |
| 7 | Output | | | |
| 1,5 | To be Grounded | | | |
| 4,8 | Case Ground | | | |

Package Dimensions

| Dimensions | Nom (mm) | Dimensions | Nom (mm) |
|------------|----------|------------|----------|
| Α | 2.08 | Е | 1.20 |
| В | 0.60 | F | 1.35 |
| С | 1.27 | G | 5.00 |
| D | 2.54 | Н | 5.00 |

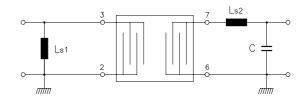
Marking



- 1. F5404 Part Code
- 2. Frequency (MHz) in 5 digits
- 3. Date Code:

Y: Last digit of year WW: Week No.

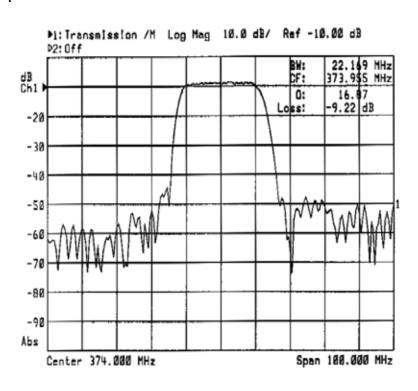
Test Circuit



$$C = 7 pF$$

Ls1 = 27 nH Ls2 = 22 nH

Typical Frequency Response



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