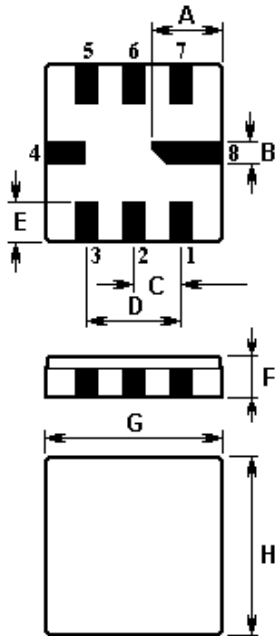


The ACTF4016/479.5/QCC8C is a one channel IF filter for receivers of satellite broadcasting system.

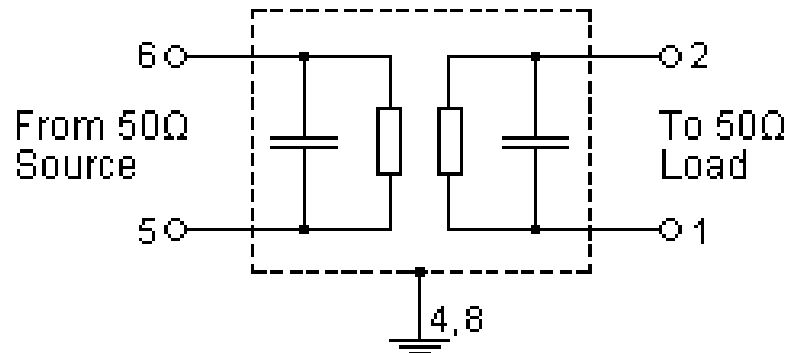
1.Package Dimension (QCC8C)



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

| Sign | Data (unit: mm) | Sign | Data (unit: mm) |
|------|-----------------|------|-----------------|
| A | 2.08 | E | 1.20 |
| B | 0.60 | F | 1.35 |
| C | 1.27 | G | 5.00 |
| D | 2.54 | H | 5.00 |

3.Equivalent LC Model and Test Circuit



In keeping with our ongoing policy of product evolution and improvement, the above specification is subject to change without notice.

ISO9001: 2000 Registered

Issue : 1.1 C1

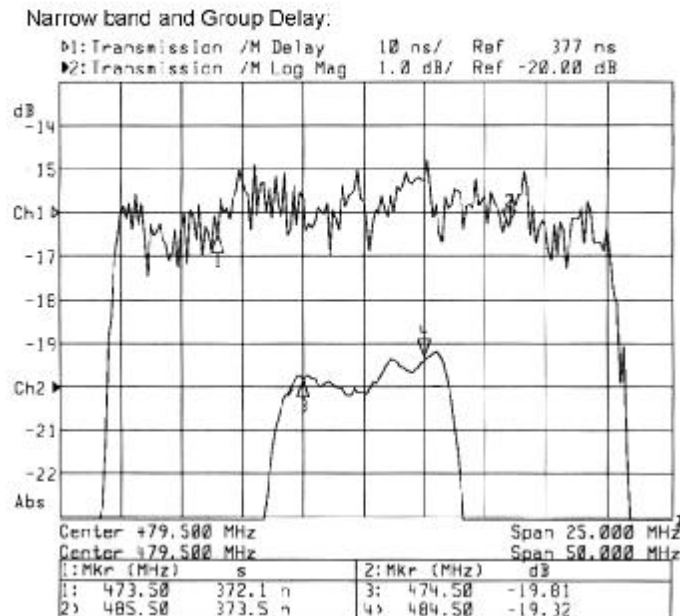
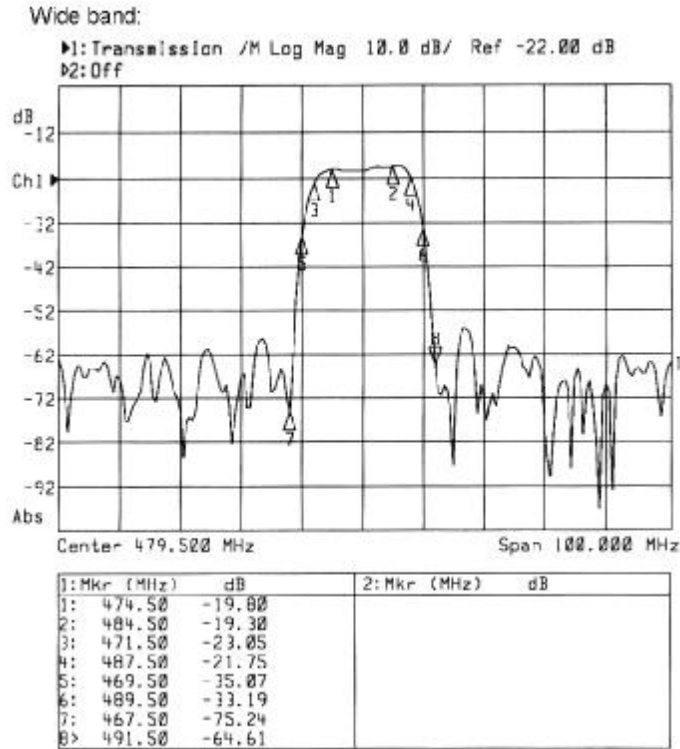
For quotations or further information please contact us at:

Date : March 2010

3 The Business Centre, Molly Millars Lane, Wokingham, Berks, RG41 2EY, UK

<http://www.actcrystals.com>

4. Typical Frequency Response



In keeping with our ongoing policy of product evolution and improvement, the above specification is subject to change without notice.

ISO9001: 2000 Registered

Issue : 1.1 C1

For quotations or further information please contact us at:

Date : March 2010

3 The Business Centre, Molly Millars Lane, Wokingham, Berks, RG41 2EY, UK

<http://www.actcrystals.com>

5.Performance

5-1.Maximum Ratings (Ta=25 °C)

| Item | Electrode | Rating | Note |
|----------------------------|----------------------------|--------------|---------|
| DC Voltage | between input or output | 10 V | |
| Instantaneous DC Voltage | Between any two electrodes | 3 V | 1/60s |
| Instantaneous AC Voltage | between input or output | 3 Vp-p | 50/60Hz |
| Storage temperature range | | -55 to +85°C | Tstg |
| Operable temperature range | | -20 to +70°C | Topr |

5-2.Electronic Characteristics

Reference temperature: $T_A = 25\text{ °C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 50\ \Omega$

| Characteristic | Min. | Typ. | Max. | Units |
|--|------|--------|------|---------|
| Centre Frequency f_c | -- | 479.50 | -- | MHz |
| Insertion attenuation 479.50 MHz (Reference level for the following data) | -- | 22.0 | 24.0 | dB |
| Pass bandwidth $\alpha_{rel} \leq 3\text{dB}$ $B_{3\text{dB}}$ | -- | 15.8 | -- | MHz |
| Relative attenuation α_{rel} | | | | |
| 467.50 MHz | -- | -47 | -30 | dB |
| 469.50 MHz | -- | -13 | -10 | dB |
| 471.50 MHz | -5 | -2.5 | -- | dB |
| 487.50 MHz | -5 | -4.0 | -- | dB |
| 489.50 MHz | -- | -21 | -10 | dB |
| 491.50 MHz | -- | -47 | -30 | dB |
| Amplitude ripple (p-p) 474.50 ... 484.50 MHz $\Delta \alpha$ | -- | 0.6 | 1.5 | dB |
| Group delay ripple (p-p) 473.50 ... 485.50 MHz Δt (Delay Aperture=1.25MHz) | -- | 14 | 40 | ns(p-p) |
| Temperature coefficient of frequency TC_f | -- | -18 | -- | ppm/K |

In keeping with our ongoing policy of product evolution and improvement, the above specification is subject to change without notice.

ISO9001: 2000 Registered

Issue : 1.1 C1

For quotations or further information please contact us at:

Date : March 2010

3 The Business Centre, Molly Millars Lane, Wokingham, Berks, RG41 2EY, UK

<http://www.actcrystals.com>

i CAUTION: Electrostatic Sensitive Device. Observe precautions for handling!

1. The frequency f_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 $VSWR \leq 1.2:1$. The test fixture L and C are adjusted for minimum insertion loss at the filter centre frequency, f_c . Note that insertion loss, bandwidth, and passband shape are dependent on the impedance matching component values and quality.
3. Unless noted otherwise, specifications apply over the entire specified operating temperature range.
4. The specifications of this device are based on the test circuit shown above and subject to change or obsolescence without notice.
5. All equipment designs utilizing this product must be approved by the appropriate government agency prior to manufacture or sale.
6. 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.

In keeping with our ongoing policy of product evolution and improvement, the above specification is subject to change without notice.

ISO9001: 2000 Registered

For quotations or further information please contact us at:

3 The Business Centre, Molly Millars Lane, Wokingham, Berks, RG41 2EY, UK

<http://www.actcrystals.com>

Issue : 1.1 C1

Date : March 2010