

# FCOM SAW FILTER

## Series FSF-5050-171M

8-pad SMD package, 5.0 x 5.0 mm



### Features

- Package: 5.0 x 5.0 mm, H 1.5 mm max.
- Specified passband: 167 to 175 MHz
- Operating temperature: -10 to +50 °C
- RoHS and REACH compliant, lead-free

### Applications

- 171 MHz RF bandpass filtering in VHF receiver front ends
- Telemetry and remote-monitoring receiver modules
- Receiver signal conditioning over the 167 to 175 MHz specified passband

### ELECTRICAL SPECIFICATIONS

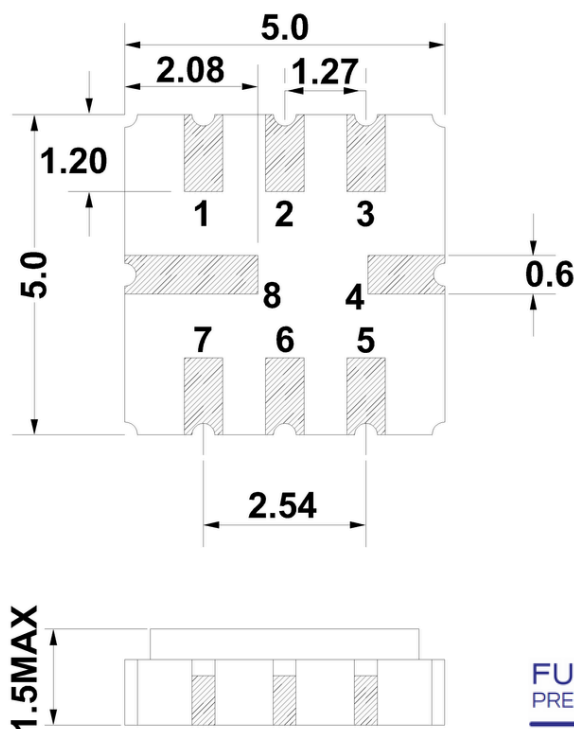
| Characteristics                              | Symbol             | Min.  | Typ. | Max. | Units | Notes                                                                                                                                                                                   |
|----------------------------------------------|--------------------|-------|------|------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Center Frequency                             | f <sub>c</sub>     | 171.0 |      |      | MHz   | IL and ripple<br>167 to 175 MHz<br>50 ohm source<br>and load<br>Matching required<br>Attenuation<br>relative to 0 dB<br>71 to 132.2 MHz<br>50 dB min.<br>209.8 to 271 MHz<br>42 dB min. |
| Insertion Loss                               | IL                 |       |      | 6.5  | dB    |                                                                                                                                                                                         |
| Specified Passband                           | f                  | 167   |      | 175  | MHz   |                                                                                                                                                                                         |
| Amplitude Ripple over f <sub>c</sub> ±4.0MHz | △a                 |       |      | 2.1  | dBp-p |                                                                                                                                                                                         |
| Operating Temperature Range                  | T <sub>A</sub>     | -10   |      | +50  | °C    |                                                                                                                                                                                         |
| Input Impedance                              | 390 ohm // 300 pF  |       |      |      |       |                                                                                                                                                                                         |
| Output Impedance                             | 1164 ohm // 374 pF |       |      |      |       |                                                                                                                                                                                         |

- ! Matching components: C1 10 pF, L1 37 nH, C2 8 pF, L2 40 nH.
- Input/output impedance at  $f_c$ : R in parallel with C. Limits apply with the specified matching.

### DIMENSION(mm)

| Pin No.    | Description  |
|------------|--------------|
| 2          | Input/Output |
| 6          | Input/Output |
| 1, 3, 5, 7 | Ground       |
| 4, 8       | Case Ground  |

Please contact FCom for other pin configurations.



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PRECISELY ACCURATE