**CMB042A - PRELIMINARY**

**3400-3600 MHz Bandpass Filter**

**Features**
- Low loss with high rejection and low ripple
- Superior power handling and reliability
- Part of the CMB family of Metro-cell TDD Bandpass Filters
- Choice for either PCB mounting with pins, or with various connectors (SMA, SMP-Max, etc.) and mounting brackets

**Applications**
- Wireless Infrastructure applications
- High-performance carrier-grade TDD basestations up to 20W at the antenna port
- Wide-band DAS, Repeaters, or small-cells including support for WiFi co-location

**Description**
Ceramic waveguide bandpass filter based on ClearPlex technology supports TDD frequency bands. Provides superior rejection, insertion loss, reliability, as well as both peak and average power handling compared to other ceramic technologies. Performance is comparable to compact Air Cavity in dramatically smaller size.

**Electrical Specifications**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Frequency (MHz)</th>
<th>Typical at 25°C</th>
<th>Spec. at 25°C</th>
<th>Spec. over -40°C to +85°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Impedance</td>
<td>-</td>
<td>50 ohms</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Average Input Power</td>
<td>-</td>
<td>-</td>
<td>32 Watt max</td>
<td>-</td>
</tr>
<tr>
<td>Peak Input Power</td>
<td>-</td>
<td>-</td>
<td>320 Watt max</td>
<td>-</td>
</tr>
</tbody>
</table>

**Input-Output Response**

- **Passband Insertion Loss (20 MHz avg)**: 3400 - 3600 MHz, 1.2 dB max
- **Passband Ripple (over 20MHz)**: 3400 - 3600 MHz, 0.7 dB max
- **Group Delay Variation (min-max)**: 3400 - 3600 MHz, 20 ns max
- **Passband Return Loss**: 3400 - 3600 MHz, 16 dB min
- **Attenuation**: 1 - 2690 MHz, 75 dB min
- 2690 - 3300 MHz, 68 dB min
- 3300 - 3380 MHz, 15 dB min
- 3620 - 3700 MHz, 15 dB min
- 3700 - 3800 MHz, 55 dB min
- 3800 - 4200 MHz, 75 dB min

**NOTE:** Use with RLF0380A lowpass filter to assure high-frequency suppression over 4.4-12.75GHz

**Speciation Allowance**
- Insertion Loss: 0.1 dB
- Return Loss: 1.0 dB
- Attenuation: 1.0 dB

Note: CTS tests each unit to the critical specifications above. Subsequent audits may deviate due to repeatability among different test systems which shall not exceed these allowances.
Mechanical Drawing
Size: 35 mm (L) x 28 mm (W) x 13 mm (H)
Weight: 38 gm

PCB Layout

Packaging and Marking

Electrical Response

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