868 MHz Ceramic Chip Antenna

ACAG1204-868-T

FEATURES

• Uses Low Temperature Co-Fired Ceramic (LTCC) Technology
• Gain of 2.63 dBi
• Omni-directional
• VSWR of ≤ 2.0

APPLICATIONS

• ISM applications
• LORA
• Sigfox
• RFID

ELECTRICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>868MHz</td>
</tr>
<tr>
<td>Bandwidth</td>
<td>20MHz typ</td>
</tr>
<tr>
<td>VSWR</td>
<td>≤2.0</td>
</tr>
<tr>
<td>Impedance</td>
<td>50Ω</td>
</tr>
<tr>
<td>Gain</td>
<td>2.63dBi</td>
</tr>
<tr>
<td>Azimuth</td>
<td>Omni-directional</td>
</tr>
<tr>
<td>Polarization</td>
<td>Linear</td>
</tr>
<tr>
<td>Operating Temperature range</td>
<td>-40°C ~+ 85°C</td>
</tr>
</tbody>
</table>

DIMENSIONS

Layout Dimensions

Unit: mm

5101 Hidden Creek Ln Spicewood TX 78669
Phone: 512-371-6159 | Fax: 512-351-8858
For terms and conditions of sales, please visit: www.abracon.com

ABRACON IS
ISO9001-2015
CERTIFIED
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EVALUATION BOARD AND MATCHING CIRCUITS

ANTENNA RESPONSE – SMITH CHART AND RETURN LOSS S11
868 MHz Ceramic Chip Antenna
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RADIATION PATTERNS

Frequency (MHz) | 858 | 868 | 878
--- | --- | --- | ---
Avg. Gain (dBi) | -2.68 | -2.05 | -2.72
Peak Gain (dBi) | 2.35 | 2.63 | 2.26
Efficiency (%) | 48 | 52 | 50
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REFLOW PROFILE

![Reflow Profile Graph]

PACKAGING

<table>
<thead>
<tr>
<th>Package Type</th>
<th>Quantity/Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inner Box</td>
<td>3000 pcs/reel</td>
</tr>
<tr>
<td>Carton</td>
<td>15000 pcs/carton</td>
</tr>
<tr>
<td>Size of the carton</td>
<td>345 x 250 x 360 mm</td>
</tr>
</tbody>
</table>

Tape Dimensions (mm)  
Reel Dimensions (mm)  

Unit: mm

CAUTIONS

1. **Static voltage**  
   Static voltage between signal & ground may cause deterioration & destruction of the component. Please avoid static voltage.

2. **Ultrasonic cleaning**  
   Ultrasonic vibration may cause deterioration & destruction of the component. Please avoid ultrasonic cleaning.

3. **Soldering**  
   Only leads of the component may be soldered. Please avoid soldering to any other part of the component, such as on the patterns as this will change the performance of the antenna.