**FEATURES**

- Single component reduces board space and component counts
- X7R dielectric characteristic
- Wrap around termination
- Thick film R/C element
- Inner electrode protection
- Flow and reflow solderable
- Automatic placement capability, standard size
- 8 pin or 10 pin configurations

**STANDARD ELECTRICAL SPECIFICATIONS**

| GLOBAL MODEL | SCHEMATIC | POWER RATING $P_{70\, ^\circ C}$ W | TEMP. COEFF. ± ppm/°C | RESISTANCE TOLERANCE ± % | RESISTANCE RANGE Ω | DIELECTRIC | TEMPERATURE COEFFICIENT % | CAP. TOL. ± % | CAP. VOLTAGE $V_{DC}$ | CAP. RANGE
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CRCA12E</td>
<td>01</td>
<td>0.125</td>
<td>200</td>
<td>5</td>
<td>10 to 1M</td>
<td>X7R</td>
<td>± 15</td>
<td>20</td>
<td>50</td>
<td>10 pF to 270 pF</td>
</tr>
<tr>
<td>CRCA12S</td>
<td>02</td>
<td>0.125</td>
<td>200</td>
<td>5</td>
<td>10 to 1M</td>
<td>X7R</td>
<td>± 15</td>
<td>20</td>
<td>50</td>
<td>10 pF to 270 pF</td>
</tr>
<tr>
<td></td>
<td>03</td>
<td>0.125</td>
<td>200</td>
<td>5</td>
<td>10 to 1M</td>
<td>X7R</td>
<td>± 15</td>
<td>20</td>
<td>50</td>
<td>10 pF to 270 pF</td>
</tr>
</tbody>
</table>

**TECHNICAL SPECIFICATIONS**

- Rated dissipation at 70 °C (CECC 40401 I EIA 575)
- Capacitor voltage rating
- Dielectric withstanding voltage (5 s, 50 mA charge)
- Category temperature range
- Insulation resistance

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>UNIT</th>
<th>RESISTOR X7R CAPACITOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated dissipation at 70 °C</td>
<td>W</td>
<td>0.125</td>
</tr>
<tr>
<td>Capacitor voltage rating</td>
<td>V</td>
<td>-</td>
</tr>
<tr>
<td>Dielectric withstanding voltage (5 s, 50 mA charge)</td>
<td>$V_{DC}$</td>
<td>- 125</td>
</tr>
<tr>
<td>Category temperature range</td>
<td>°C</td>
<td>-55 / +125</td>
</tr>
<tr>
<td>Insulation resistance</td>
<td>Ω</td>
<td>$&gt; 10^{10}$</td>
</tr>
</tbody>
</table>

**GLOBAL PART NUMBER INFORMATION**

New Global Part Numbering: CRCA12E081472220R (preferred part numbering format)

<table>
<thead>
<tr>
<th>MODEL</th>
<th>PIN COUNT</th>
<th>SCHEMATIC</th>
<th>RESISTANCE VALUE</th>
<th>CAPACITANCE VALUE</th>
<th>PACKAGING</th>
<th>SPECIAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRCA12E</td>
<td>08 = 8 pin</td>
<td>1 = 01</td>
<td>2 digit significant figures, followed by a multiplier</td>
<td>2 digit significant figures, followed by multiplier</td>
<td>E = Lead (Pb)-free, T/R (2000 pcs)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10 = 10 pin</td>
<td>2 = 02</td>
<td>100 = 10 Ω</td>
<td>100 = 10 pF</td>
<td>R = Tin/Lead, T/R (2000 pcs)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 = 03</td>
<td>683 = 68 kΩ</td>
<td>560 = 56 pF</td>
<td>(Dash number)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 = Special</td>
<td>105 = 1 MΩ</td>
<td>271 = 270 pF</td>
<td>(Up to 1 digit)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Tolerance ± 5 %)</td>
<td>(Tolerance = ± 20 %)</td>
<td>Blank = Standard</td>
<td></td>
</tr>
</tbody>
</table>

Historical Part Number Example: CRCA12E080147220MRB8 (will continue to be accepted)

**Note**

- For additional information on packaging, refer to the Surface Mount Network Packaging document ([www.vishay.com/doc?31540](http://www.vishay.com/doc?31540)).

Revision: 04-Nov-16

For technical questions, contact: ff2aresistors@vishay.com

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CRCA

END OF LIFE - LAST AVAILABLE PURCHASE DATE: 02-DEC-2016

DIMENSIONS

Note:
- The images shown are for an 8 pin part. For a 10 pin part, use the same pitch and add another pair of "a" dimension pads to the inner solder pads.

SCHEMATICS

PERFORMANCE

TEST CONDITIONS OF TEST

TEST RESULTS (TYPICAL TEST LOTS)

APPLICABLE SPECIFICATIONS
- IPC standards
- EIA 575
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