State of the Art, Inc.

Semi-Precision Thick Film Chip Resistor
MIL-PRF-55342/03 Solderable RM1005

Performance

Resistance Range* 1Ω to 22 MΩ
Tolerances (± %)* 1, 2, 5, 10
TCR (± ppm/°C)* 100, 200, 300
Power Rating 200 mW
Voltage Rating 75 V
Operating Range -65 to 150°C
Product Levels M, P, R, S, U, V, T

*see QPL55342 for part number availability

Maximum Allowable Drift

<table>
<thead>
<tr>
<th>Temperature Characteristic</th>
<th>K</th>
<th>L</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCR (ppm/°C)</td>
<td>±100</td>
<td>±200</td>
<td>±300</td>
</tr>
<tr>
<td>Power Conditioning</td>
<td>±0.5%</td>
<td>±0.5%</td>
<td>±0.5%</td>
</tr>
<tr>
<td>Low Temperature Operation</td>
<td>±0.25%</td>
<td>±0.25%</td>
<td>±0.5%</td>
</tr>
<tr>
<td>Short Time Overload</td>
<td>±0.25%</td>
<td>±0.25%</td>
<td>±0.5%</td>
</tr>
<tr>
<td>High Temperature Exposure</td>
<td>±0.5%</td>
<td>±0.5%</td>
<td>±1.0%</td>
</tr>
<tr>
<td>Moisture Resistance</td>
<td>±0.5%</td>
<td>±0.5%</td>
<td>±0.5%</td>
</tr>
<tr>
<td>Life (Qualification)</td>
<td>±0.5%</td>
<td>±0.5%</td>
<td>±2.0%</td>
</tr>
<tr>
<td>Life (FR Level)</td>
<td>±2.0%</td>
<td>±2.0%</td>
<td>±2.0%</td>
</tr>
<tr>
<td>Resistance to Soldering Heat</td>
<td>±0.25%</td>
<td>±0.25%</td>
<td>±0.25%</td>
</tr>
<tr>
<td>Resistance to Bonding Exposure</td>
<td>±0.25%</td>
<td>±0.25%</td>
<td>±0.25%</td>
</tr>
</tbody>
</table>

Part Number

M55342K03B100DS - TR

Packaging: -TR: Tape & Reel -W: Waffle Tray

Product Level (1000 hrs.): M: 1% P: 0.1% R & U: 0.01% S & V: 0.001% T: Space 0.001%

Resistance Value and Tolerance:

Three numerals and a letter indicating decimal, value range, and tolerance

Termination Material: B: Solderable (SnPb solder over nickel)

Size: 03: RM1005

Performance Specification MIL-PRF-55342

Mechanical

Length (a) .101(.098 - .112) 2.58(2.49 - 2.84)
Width (b) .049(.045 - .055) 1.24(1.14 - 1.40)
Thickness (c) .017(.010 - .033) 0.43(0.25 - 0.84)
Top Termination (d) .015(.010 - .020) 0.38(0.25 - 0.51)
Bottom Termination (e) .015(.010 - .020) 0.38(0.25 - 0.51)

Approximate Weight 0.00520 g

Recommended Minimum Bond Pads (inches)

-0.32 0.066

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