ML3216 SERIES – Multilayer Chip Inductors

PART NUMBERING SYSTEM

<table>
<thead>
<tr>
<th></th>
<th>ML</th>
<th>3216</th>
<th>–</th>
<th>1R0K</th>
<th>–</th>
<th>LF</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPE</td>
<td></td>
<td>DIMENSIONS</td>
<td>INDUCTANCE</td>
<td>LEAD FREE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SHAPES AND DIMENSIONS

UNIT: mm

FEATURES

- Monolithic structure for high reliability.
- No cross coupling between inductors due to magnetic shielded. Ideal for high density installation.
- Dimensions are unified for automatic mounting.
- Excellent solderability and high heat resistance for either flow or reflow soldering.
- Closed magnetic circuit avoids crosstalk and is suitable for high density printed circuit boards.
- Application for Personal or Notebook computers and peripheral equipment (CD-ROM, Hard Disk ...)

SPECIFICATION TABLE

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>INDUCTANCE (μH)</th>
<th>Q. MIN.</th>
<th>L, Q (MHz) TEST FREQUENCY</th>
<th>SRF (MHz) MIN.</th>
<th>DCR (Ω) (max)</th>
<th>IDC(mA) (max)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ML3216-47NM-LF</td>
<td>0.047±20%</td>
<td>20</td>
<td>50</td>
<td>320</td>
<td>0.15</td>
<td>300</td>
</tr>
<tr>
<td>ML3216-68NM-LF</td>
<td>0.068±20%</td>
<td>20</td>
<td>50</td>
<td>280</td>
<td>0.25</td>
<td>300</td>
</tr>
<tr>
<td>ML3216-82NM-LF</td>
<td>0.082±20%</td>
<td>20</td>
<td>50</td>
<td>255</td>
<td>0.25</td>
<td>300</td>
</tr>
<tr>
<td>ML3216-R10K-LF</td>
<td>0.10±10%</td>
<td>20</td>
<td>25</td>
<td>235</td>
<td>0.25</td>
<td>250</td>
</tr>
<tr>
<td>ML3216-R12K-LF</td>
<td>0.12±10%</td>
<td>20</td>
<td>25</td>
<td>220</td>
<td>0.30</td>
<td>250</td>
</tr>
<tr>
<td>ML3216-R15K-LF</td>
<td>0.15±10%</td>
<td>20</td>
<td>25</td>
<td>200</td>
<td>0.30</td>
<td>250</td>
</tr>
<tr>
<td>ML3216-R18K-LF</td>
<td>0.18±10%</td>
<td>20</td>
<td>25</td>
<td>185</td>
<td>0.40</td>
<td>250</td>
</tr>
</tbody>
</table>
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## SPECIFICATION TABLE

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>INDUCTANCE (μH)</th>
<th>Q. MIN.</th>
<th>L, Q (MHz) TEST FREQUENCY</th>
<th>SRF (MHz) MIN.</th>
<th>DCR (Ω) (max)</th>
<th>IDC(mA) (max)</th>
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</thead>
<tbody>
<tr>
<td>ML3216-R22K-LF</td>
<td>0.22±10%</td>
<td>20</td>
<td>25</td>
<td>170</td>
<td>0.40</td>
<td>250</td>
</tr>
<tr>
<td>ML3216-R27K-LF</td>
<td>0.27±10%</td>
<td>20</td>
<td>25</td>
<td>150</td>
<td>0.50</td>
<td>250</td>
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<tr>
<td>ML3216-R33K-LF</td>
<td>0.33±10%</td>
<td>20</td>
<td>25</td>
<td>145</td>
<td>0.60</td>
<td>250</td>
</tr>
<tr>
<td>ML3216-R39K-LF</td>
<td>0.39±10%</td>
<td>25</td>
<td>25</td>
<td>135</td>
<td>0.50</td>
<td>200</td>
</tr>
<tr>
<td>ML3216-R47K-LF</td>
<td>0.47±10%</td>
<td>25</td>
<td>25</td>
<td>125</td>
<td>0.60</td>
<td>200</td>
</tr>
<tr>
<td>ML3216-R56K-LF</td>
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<td>25</td>
<td>25</td>
<td>115</td>
<td>0.70</td>
<td>150</td>
</tr>
<tr>
<td>ML3216-R68K-LF</td>
<td>0.68±10%</td>
<td>25</td>
<td>25</td>
<td>105</td>
<td>0.80</td>
<td>150</td>
</tr>
<tr>
<td>ML3216-R82K-LF</td>
<td>0.82±10%</td>
<td>25</td>
<td>25</td>
<td>100</td>
<td>0.90</td>
<td>150</td>
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<td>ML3216-1R0K-LF</td>
<td>1.0±10%</td>
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<td>10</td>
<td>75</td>
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<td>100</td>
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<tr>
<td>ML3216-1R2K-LF</td>
<td>1.2±10%</td>
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<td>10</td>
<td>65</td>
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<td>100</td>
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<tr>
<td>ML3216-1R5K-LF</td>
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<td>10</td>
<td>60</td>
<td>0.50</td>
<td>50</td>
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<tr>
<td>ML3216-1R8K-LF</td>
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<td>10</td>
<td>55</td>
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<td>50</td>
</tr>
<tr>
<td>ML3216-2R2K-LF</td>
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<td>50</td>
<td>0.60</td>
<td>50</td>
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<tr>
<td>ML3216-2R7K-LF</td>
<td>2.7±10%</td>
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<td>45</td>
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<td>50</td>
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<td>41</td>
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<tr>
<td>ML3216-6R8K-LF</td>
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</tr>
<tr>
<td>ML3216-8R2K-LF</td>
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<tr>
<td>ML3216-100K-LF</td>
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<tr>
<td>ML3216-120K-LF</td>
<td>12±10%</td>
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<td>22</td>
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<tr>
<td>ML3216-150K-LF</td>
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<td>1</td>
<td>19</td>
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</tr>
<tr>
<td>ML3216-180K-LF</td>
<td>18±10%</td>
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<td>1</td>
<td>18</td>
<td>0.70</td>
<td>5</td>
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<tr>
<td>ML3216-220K-LF</td>
<td>22±10%</td>
<td>35</td>
<td>1</td>
<td>16</td>
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<td>ML3216-270K-LF</td>
<td>27±10%</td>
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<td>1</td>
<td>14</td>
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<td>ML3216-330K-LF</td>
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<td>ML3216-390K-LF</td>
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<td>2</td>
<td>11</td>
<td>3.00</td>
<td>10</td>
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<tr>
<td>ML3216-470K-LF</td>
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<td>40</td>
<td>2</td>
<td>10</td>
<td>3.40</td>
<td>10</td>
</tr>
</tbody>
</table>
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INDUCTANCE vs. FREQUENCY
CHARACTERISTICS

INDUCTANCE vs. FREQUENCY
CHARACTERISTICS

Q vs. FREQUENCY CHARACTERISTICS
ML3216 SERIES – Multilayer Chip Inductors

PACKAGING SPECIFICATION

<table>
<thead>
<tr>
<th>Type</th>
<th>A</th>
<th>B</th>
<th>T</th>
<th>t</th>
<th>T(ψ178mm)</th>
<th>T(ψ330mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ML3216</td>
<td>1.90</td>
<td>3.50</td>
<td>1.40</td>
<td>0.2</td>
<td>3000 pcs/reel</td>
<td>-</td>
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