SMD Inductors(Coils)
For Power Line(Wound, Magnetic Shielded)

SLF Series  SLF10145

FEATURES
• The SLF series are characterized by low profile, low DC resistance, and high current handling capacities.
• Because they are magnetically shielded, these parts can be used in high-density mounting configurations.
• Flat bottom surface ensures secure, reliable mounting.
• Provided in embossed carrier tape packaging for use with automatic mounting machines.

APPLICATIONS
Portable telephones, personal computers, hard disk drives, and other electronic equipment.

SPECIFICATIONS
Operating temperature range –20 to +90°C
[Including self-temperature rise]
Storage temperature range –40 to +90°C[Unit of products]

RECOMMENDED REFLOW SOLDERING CONDITIONS

PRODUCT IDENTIFICATION
SLF 10145 T- 220 M 1R9 - PF (1) (2) (3) (4) (5) (6) (7)

(1) Series name
(2) Dimensions
10145 10.1×10.1×4.5mm (L×W×T)
(3) Packaging style
T Taping(reel)
(4) Inductance value
100 10µH
101 100µH
(5) Inductance tolerance
M ±20%
N ±30%
(6) Rated current
1R9 1.9A
R79 0.79A
(7) Lead-free compatible product
PF Lead-free compatible product

PACKAGING STYLE AND QUANTITIES
Packaging style Quantity
Taping 500 pieces/reel

• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

• All specifications are subject to change without notice.
**ELECTRICAL CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Inductance (µH)</th>
<th>Inductance tolerance</th>
<th>Test frequency L (kHz)</th>
<th>DC resistance (Ω)±20%</th>
<th>Rated current [A]* max. Based on inductance change</th>
<th>Based on temperature rise</th>
<th>Part No.</th>
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<tbody>
<tr>
<td>3.3</td>
<td>±30%</td>
<td>1</td>
<td>0.0161</td>
<td>4.9</td>
<td>3.7</td>
<td>SLF1045T-3R3N3R7-PF</td>
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<td>5.6</td>
<td>±20%</td>
<td>1</td>
<td>0.0220</td>
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<td>10</td>
<td>±20%</td>
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<td>0.0364</td>
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<tr>
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<td>0.0591</td>
<td>2.1</td>
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<td>0.0815</td>
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<tr>
<td>47</td>
<td>±20%</td>
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<td>0.1</td>
<td>1.4</td>
<td>1.5</td>
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<tr>
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<td>0.2</td>
<td>1.1</td>
<td>1.1</td>
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<tr>
<td>150</td>
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<tr>
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<tr>
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<tr>
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</table>

* Rated current: Value obtained when current flows and the temperature has risen to 30°C or when DC current flows and the nominal value of inductance has fallen by 10%, whichever is smaller.

• Test equipment: L: 4194A IMPEDANCE/GAIN-PHASE ANALYZER HP, or equivalent (Measured at 1kHz/0.5V)

Rdc: MATSUSHITA VP-2941A DIGITAL MILLIOHM METER, or equivalent

**TYPICAL ELECTRICAL CHARACTERISTICS**

**INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS**

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