Inductors

For Power Line SMD

RLF Series RLF12560 Type

Accompanying large current power supplies, these inductors have secured efficient characteristics by improving its magnetic circuit based on existing products. These products meet resistance reducing and current enlargement.

FEATURES

- Comparing with existing products(RLF12545), DC current superimposition characteristic has improved. Especially, inductance rises about 10% in spite of high temperature at 100°C. In addition, inductance has risen about 30% at normal temperature.
- Using flat-square wire for winding, that is rising space factor, these inductors can reduce current resistance and suppress calorific value.
- Forming internal gap, their structure suppress outgoing magnetic flux leakage.
- Completely Pb free for both inside of products and terminal electrodes.

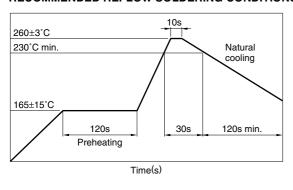
APPLICATIONS

• Choke coils in power circuit of personal computers, crystal liquid television monitors, set top boxes, amusement equipment, etc.

SPECIFICATIONS

Operating temperature range	−20 to +105°C		
operating temperature range	[Including self-temperature rise]		
Storage temperature range	-40 to +105°C[Unit of products]		

RECOMMENDED REFLOW SOLDERING CONDITIONS



PRODUCT IDENTIFICATIONS

RLF 12560 T- 1R0 N 140 (5) (6)

- (1) Series name
- (2) Dimensions L×W×T

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12560	12.5×12.8×6.0mm	

(3) Packaging style

T Taping(reel)

(4) Inductance value

1R0	1μΗ	
100	10uH	

(5) Inductance tolerance

M	±20%	
N	±30%	

(6) Rated current

8R2	8.2A	
140	14.4A	

PACKAGING STYLE AND QUANTITIES

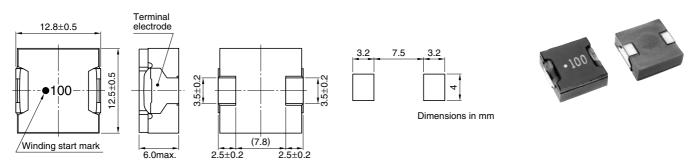
Packaging style	Quantity
Taping	500 pieces/reel

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SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN

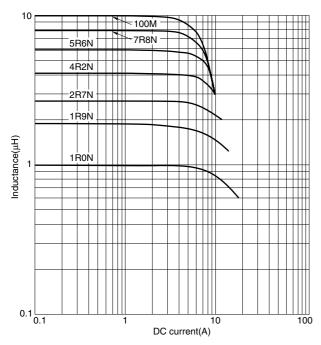


ELECTRICAL CHARACTERISTICS

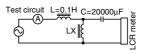
Industance	Inductance tolerance (%)	Test frequency L (kHz)	DC resistance (mΩ)±20%	Rated current(A)*		
Inductance (μΗ)				Based on inductance change	Based on temperature rise	Part No.
1.0	±30	100	2.8	18.5 max.	14.4 typ.	RLF12560T-1R0N140
1.9	±30	100	3.6	15.6 max.	12.7 typ.	RLF12560T-1R9N120
2.7	±30	100	4.5	14.4 max.	11.5 typ.	RLF12560T-2R7N110
4.2	±30	100	7.4	10.2 max.	10.0 typ.	RLF12560T-4R2N100
5.6	±30	100	8.5	9.7 max.	9.2 typ.	RLF12560T-5R6N9R2
7.8	±30	100	10.2	8.2 max.	8.4 typ.	RLF12560T-7R8N8R2
10	±20	100	12.4	7.5 max.	7.8 typ.	RLF12560T-100M7R5

^{*} Rated current: Value obtained when current flows and the temperature has risen to 40°C or when DC current flows and the initial value of inductance has fallen by 50%, whichever is smaller.

TYPICAL ELECTRICAL CHARCTERISTICS INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



MEASURING CIRCUIT



Test equipment Inductance: YHP 4194A IMPEDANCE GAIN/PHASE ANALYZER, or equivalent DC resistance: DIGITAL MILLIOHM METER VP-2941A MATSUSHITA, or equivalent