Inductors

For Power Line
SMD

RLF Series RLF12545 Type

This inductor is designed for power circuits that require a low profile, low inductance, and large current, such as those used in notebook PCs. It measures L12.5×W12.8×T4.5mm, about 40% lower in profile than our existing products (the SLF12575 type).

FEATURES

- With the height at only 4.5mm, and retaining the DC current superimposition characteristic, this inductor reduces DC resistance 20 to 50% lower than our existing products(the SLF12575 type).
- Structural efficiency allows for both a lower profile than, and electrical features equivalent to, our existing devices.
- The low profile makes the inductor particularly optimal for power circuit applications requiring low voltages and large current.
- The inductor allows for application of reflow solder.

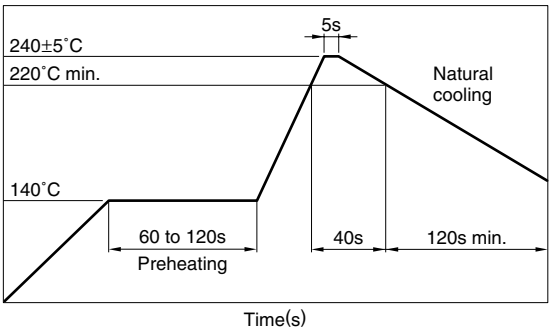
APPLICATIONS

- Choke coils for thin-type power circuits used in notebook PCs and similar items
- 20W-class step-down converters

SPECIFICATIONS

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

RECOMMENDED REFLOW SOLDERING CONDITIONS



PRODUCT IDENTIFICATIONS

RLF	12545	T-	2R7	N	8R7
(1)	(2)	(3)	(4)	(5)	(6)

(1) Series name

(2) Dimensions L×W×T

12545	12.5×12.8×4.5mm

(3) Packaging style

T	Taping(reel)

(4) Inductance value

2R7	2.7µH
100	10µH

(5) Inductance tolerance

M	±20%
N	±30%

(6) Rated current

8R7	8.7A

PACKAGING STYLE AND QUANTITIES

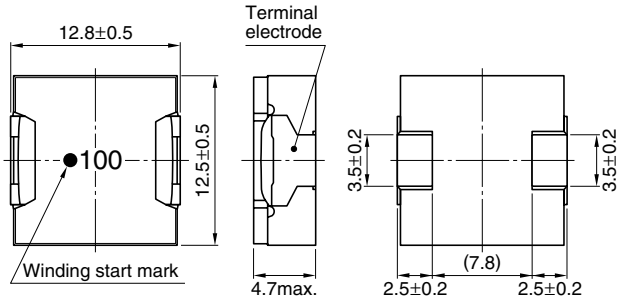
Packaging style	Quantity
Taping	500 pieces/reel

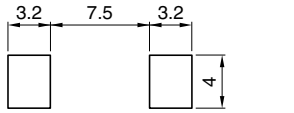
Inductors

For Power Line
SMD

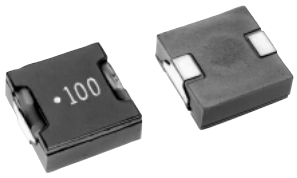
RLF Series RLF12545 Type

SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN





Dimensions in mm



ELECTRICAL CHARACTERISTICS

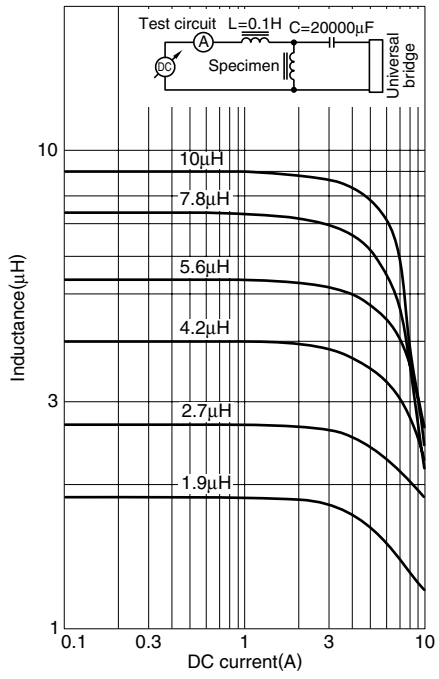
Inductance (μH)	Inductance tolerance (%)	Test frequency L (kHz)	DC resistance (mΩ)±20%	Rated current(A)*		Part No.
				Based on inductance change	Based on temperature rise	
1.9	±30	100	3.6	13 max.	10.5 typ.	RLF12545T-1R9N100
2.7	±30	100	4.5	12 max.	8.7 typ.	RLF12545T-2R7N8R7
4.2	±30	100	7.4	9.5 max.	6.5 typ.	RLF12545T-4R2N6R5
5.6	±30	100	8.5	8 max.	6.1 typ.	RLF12545T-5R6N6R1
7.8	±30	100	10.2	7 max.	5.4 typ.	RLF12545T-7R8N5R4
10	±20	100	12.4	6 max.	5.1 typ.	RLF12545T-100M5R1

* 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.

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

TYPICAL ELECTRICAL CHARCTERISTICS

INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



TDK

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Fixed Inductors ***category:***

Click to view products by TDK ***manufacturer:***

Other Similar products are found below :

CR32NP-100KC CR43NP-680KC CR54NP-820KC CR54NP-8R5MC CTX32CT-100 70F224AI MGDQ4-00004-P MHL1ECTTP18NJ MHL1JCTTD12NJ PE-51506NL PE-53601NL PE-53602NL PE-53630NL PE-53824SNLT PE-62892NL PE-92100NL PG0434.801NLT PG0936.113NLT 9310-16 PM06-2N7 PM06-39NJ A01TK 1206CS-471XJ HC2-2R2TR HC2LP-R47-R HC3-2R2-R 1206CS-151XG RCH664NP-140L RCH664NP-4R7M RCH8011NP-221L RCP1317NP-332L RCP1317NP-391L RCR1010NP-470M RCR110DNP-331L DH2280-4R7M DS1608C-106 ASPI-4020HI-R10M-T B10TJ B82477P4333M B82498B3101J000 B82498B3680J000 ELJ-RE27NJF2 1812CS-153XJ 1812CS-183XJ 1812CS-223XJ 1812LS-104XJ 1812LS-105XJ 1812LS-124XJ 1812LS-154XJ 1812LS-223XJ