(1/2)

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

# FLF Series FLF3215

# FEATURES

- · Resin mold structure: stress and shock resistant.
- A magnetic shield structure using plastic magnet material for the exterior.
- The product uses metal terminals, which realize excellent connection reliability.
- From 0.47 $\mu$ H to 100 $\mu$ H, all of the products are available in the E-3 series.
- It is lead-free compatible.

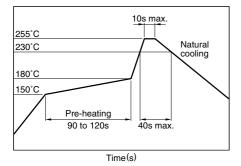
# APPLICATIONS

• HDDs, wirelessLAN modules, digital cameras, flat-TVs

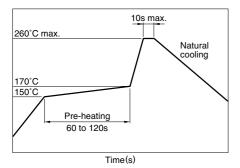
## SPECIFICATIONS

Operating temperature range	-40 to +125°C [Including self-temperature rise]		
Storage temperature range	–40 to +125°C		

# RECOMMENDED SOLDERING CONDITIONS REFLOW SOLDERING



### FLOW SOLDERING



#### **IRON SOLDERING**

Tip temperature	300 to 350°C
Heating time	3 seconds/soldering
Soldering rod specifications	Output: 30W Tip diameter: 1mm

Based on the above conditions, use a maximum product temperature of 260°C and a maximum accumulated heating time of 10 seconds as a guideline.

Please contact us for details.

## **PRODUCT IDENTIFICATION**

FLF	LF 3215		1R0	Ν
(1)	(2)	(3)	(4)	(5)

(1) Series name

#### (2) Dimensions

3215

#### (3) Packaging style

Т

#### (4) Inductance value

1R0	1µH
100	10µH
101	100µH

Taping (reel)

3.2×2.5×1.55mm (L×W×T)

#### (5) Inductance tolerance

Μ	±20%	
Ν	±30%	

## PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity		
Taping	2000 pieces/reel		

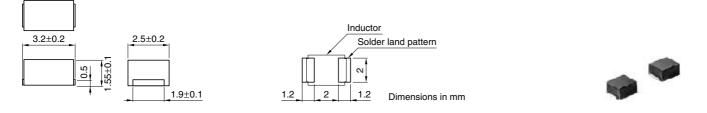
Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

• All specifications are subject to change without notice.

(2/2)

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#### SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



# **ELECTRICAL CHARACTERISTICS**

Inductance	Inductorse	0	Test	Self-resonant	DC	Rated current*(mA)max.		Part No.
(μH)	Inductance tolerance	Q ref.	frequency L,Q frequency (MHz) (MHz)min.		resistance (Ω)±20%	Based on inductance change	Based on temperature rise	
0.47	±30%	30	1	200	0.021	2800	2800	FLF3215T-R47N
1	±30%	30	1	100	0.03	2000	2350	FLF3215T-1R0N
2.2	±20%	20	1	60	0.05	1400	1800	FLF3215T-2R2M
4.7	±20%	20	1	40	0.09	1000	1360	FLF3215T-4R7M
10	±20%	25	1	25	0.20	700	900	FLF3215T-100M
22	±20%	30	1	14	0.45	450	600	FLF3215T-220M
47	±20%	35	1	9	0.90	280	430	FLF3215T-470M
100	±20%	40	1	6	2.00	200	280	FLF3215T-101M

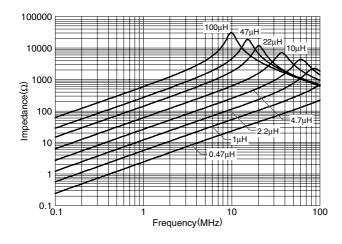
\* Rated current: The rated current is the smaller of the values given based on the rate of inductance change (30% decrease from the initial value) or the temperature rise (temperature rise of 40°C caused by the heat generated by the product itself).

• Test equipment L, Q: Agilent 4294A PRECISION IMPEDANCE ANALYZER

SRF: HP8753C NETWORK ANALYZER or equivalent

Rdc: ADEX AX-114N DIGITAL OHM METER or equivalent

# TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



# INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS

