

# Inductors

## For Power Line

### SMD

# LLF Series LLF4019 Type

## FEATURES

- The LLF series are characterized by small size, low Rdc and high current handling capacity in this package size.
- New Concept SMD power inductor without resin base. Without resin base, small package size but high electrical performance.
- As the affinity for environment, LLF series doesn't contain any of Pb materials.
- Provided in embossed carrier tape packaging for automatic mounting machines.

## APPLICATIONS

DVC, DSC, PDA, MD, MP3, LCD Display, GSM Phone, Cellular Phone, Cordless Telephone, etc.

## SPECIFICATIONS

Type	Operating temperature range [including self-temperature rise]	Storage temperature range [Unit of products]
LLF4017	-20 to +105	-40 to +105
LLF4019	-20 to +105	-40 to +105

## PRODUCT IDENTIFICATION

LLF 4017 T- 100 M R80 -

Series name (SMD type Choke Coil)

### Dimensions LxWxT

4017	4.0x4.0x1.7mm
4019	4.0x4.0x1.9mm

### Packaging style

T	Taping(reel)
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### Inductance value

4R7	4.7 $\mu$ H
100	10 $\mu$ H

### Inductance tolerance

M	$\pm$ 20%
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### Rated current

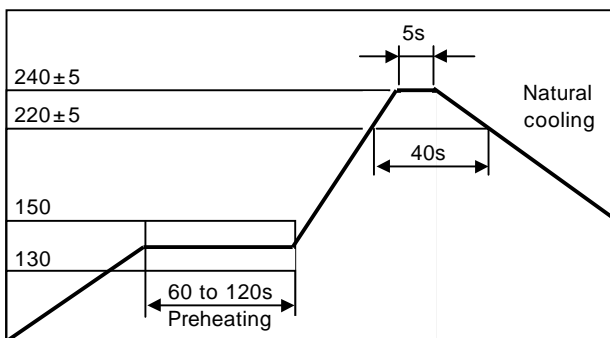
1R1	1.1A
R80	0.8A

Series No.

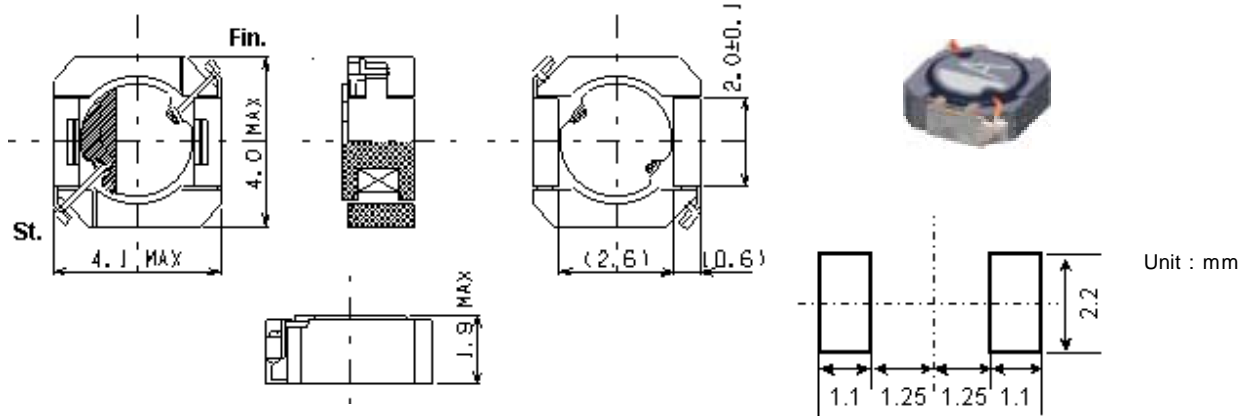
## PACKAGING STYLE AND QUANTITIES

Packaging style	Type	Quantity
Taping	LLF4017	1,000 pieces/reel
	LLF4019	1,000 pieces/reel

## RECOMMENDED REFLOW SOLDERING CONDITIONS



SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



ELECTRICAL CHARACTERISTICS

Inductance ( $\mu\text{H}$ )	Inductance tolerance(%)	Inductance ( $\mu\text{H}$ ) at $I_{dc1}$	Test Frequency(KHz)	DC Resistance ( $\text{m}\Omega$ ) Max.	Rated current (mA)*		Part No.
					Based on inductance change (A Max.)	Based on temperature rise (A Typ.)	
1.5	$\pm 30$	0.9	100	62	2.00	1.74	LLF4019T-1R5N1R7-C
2.2	$\pm 30$	1.3	100	77	1.60	1.53	LLF4019T-2R2N1R5-C
3.3	$\pm 30$	1.9	100	94	1.50	1.38	LLF4019T-3R3N1R3-C
4.7	$\pm 30$	2.8	100	113	1.20	1.26	LLF4019T-4R7N1R2-C
6.8	$\pm 30$	4.0	100	140	1.00	1.13	LLF4019T-6R8N1R0-C
10	$\pm 20$	6.0	100	150	0.90	1.10	LLF4019T-100MR90-C
15	$\pm 20$	9.0	100	280	0.70	0.80	LLF4019T-150MR70-C
22	$\pm 20$	13.0	100	400	0.55	0.67	LLF4019T-220MR55-C
33	$\pm 20$	19.0	100	520	0.45	0.59	LLF4019T-330MR45-C

\* Rated current: Value obtained when current flows, the temperature has risen to 35 or when DC current flows, the value of inductance should be followed L spec. at  $I_{dc1}$ .

- Test equipment Inductance: HP4294A PRECISION IMPEDANCE ANALYZER, or equivalent  
Rdc: DIGITAL MILLIOHM METER VP-2941A MATSUSHITA, or equivalent

TYPICAL ELECTRICAL CHARACTERISTICS  
INDUCTANCE CHANGE vs. DC SUPERPOSITION  
CHARACTERISTICS

