TDK

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

Conformity to RoHS Directive

RLF Series RLF7030

FEATURES

- Low profile design
  Mount area: 7.3×6.8mm
  Height: 3.2mm max.
- Be similar series to SLF7032, but this is design exercising low loss and large current characteristic. In comparison with SLF7032, be DC resistance component 80% and rating DC current 2.5 times.
- High magnetic shield construction should actualize high resolution for EMC protection.
- Available for automatic mounting in tape and real package.
- The products do not contain lead and support lead-free soldering.
- It is a product conforming to RoHS directive.

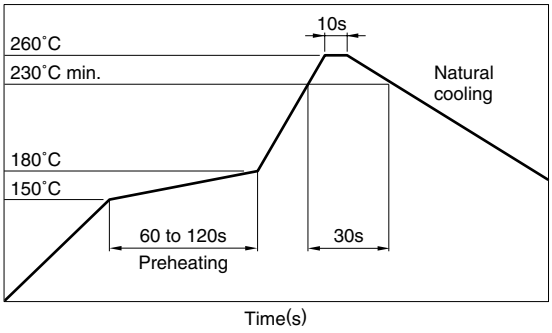
APPLICATIONS

Notebook type and mobile computers, amusement equipment, VRMs, automotive equipment, etc.

SPECIFICATIONS

Operating temperature range	–40 to +85°C [Including self-temperature rise]
Storage temperature range	–40 to +125°C[Unit of products]

RECOMMENDED REFLOW SOLDERING CONDITIONS



PRODUCT IDENTIFICATION

RLF	7030	T-	1R0	N	6R4
(1)	(2)	(3)	(4)	(5)	(6)

(1) Series name

(2) Dimensions

7030	7.3x6.8x3.2 (L×W×T)

(3) Packaging style

T	Taping(reel)

(4) Inductance value

1R0	1µH
6R8	6.8µH

(5) Inductance tolerance

M	±20%
N	±30%

(6) Rated current

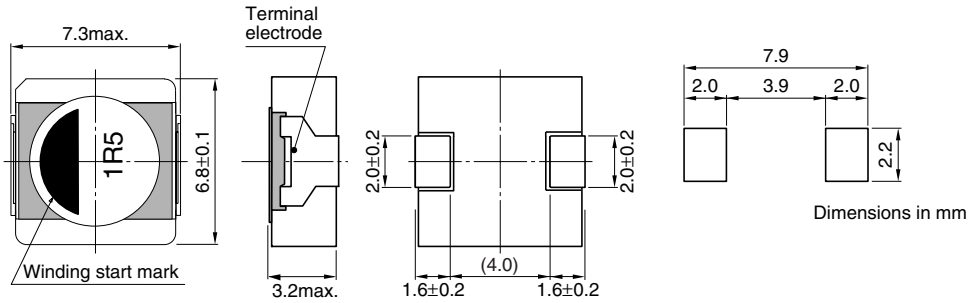
6R4	6.4A
2R8	2.8A

PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	1000 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.

SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



ELECTRICAL CHARACTERISTICS

Inductance (μH)	Inductance tolerance	Test frequency L (kHz)	DC resistance (mΩ)	Rated current(A)* max.		Part No.
				Based on inductance change	Based on temperature rise	
1	±30%	100	8.8 max.(7.3 typ.)	7.9	6.4	RLF7030T-1R0N6R4
1.5	±30%	100	9.6 max.(8.0 typ.)	6.5	6.1	RLF7030T-1R5N6R1
2.2	±20%	100	12 max. (10 typ.)	5.5	5.4	RLF7030T-2R2M5R4
3.3	±20%	100	20 max. (17.4 typ.)	4.4	4.1	RLF7030T-3R3M4R1
4.7	±20%	100	31 max. (26 typ.)	3.5	3.4	RLF7030T-4R7M3R4
6.8	±20%	100	45 max. (37.3 typ.)	3.0	2.8	RLF7030T-6R8M2R8

* Rated current: Value obtained when current flows and the temperature has risen to 40°C or when DC current flows and the nominal value of inductance has fallen by 30%, whichever is smaller.

TYPICAL ELECTRICAL CHARCTERISTICS

INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS