TDK

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

Conformity to RoHS Directive

NLFV Series NLFV32

FEATURES

- The product has good heat durability that withstands lead-free compatible reflow soldering conditions.
- Lead-free material is used for the plating on the terminal.
- The product uses metal terminals, which realize excellent connection reliability.
- From 1μH to 1000μH, all of the products are available in the E-6 series.
- This product is in compliance with the RoHS Directive. Other products with specifications that do not include exemption regulations are also available.

APPLICATIONS

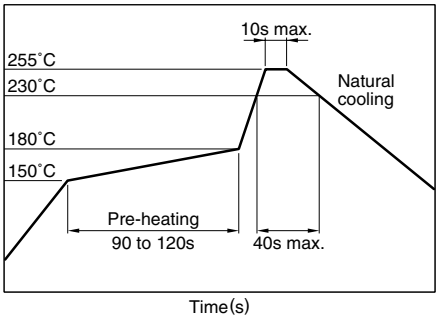
- Audio-visual equipment including TVs, VCRs and digital cameras.
- Electronic equipment used in communication infrastructures including xDSL and mobile base stations.
- Electronic equipment used in onboard automobile equipment including car audio and car navigation systems.
- Other electronic equipment including HDDs and ODDs.

SPECIFICATIONS

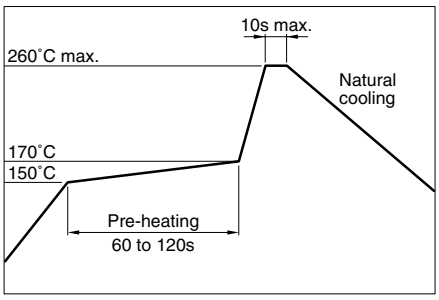
Operating temperature range	–40 to +105°C [Including self-temperature rise]
Storage temperature range	–40 to +105°C

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

NLFV	32	T-	2R2	M	-EF
(1)	(2)	(3)	(4)	(5)	(6)

(1) Series name

(2) Dimensions

32	3.2×2.5×2.2mm (L×W×T)

(3) Packaging style

T	Taping (reel)

(4) Inductance value

1R0	1μH
100	10μH
101	100μH

(5) Inductance tolerance

K	±10%
M	±20%

(6) Lead-free compatible product

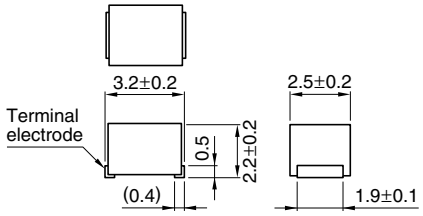
EF	Conformity to RoHS directive

PACKAGING STYLE AND QUANTITIES

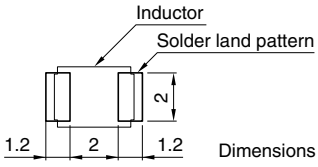
Packaging style	Quantity
Taping	2000 pieces/reel

- 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.

SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



Weight: 50mg



Dimensions in mm

ELECTRICAL CHARACTERISTICS

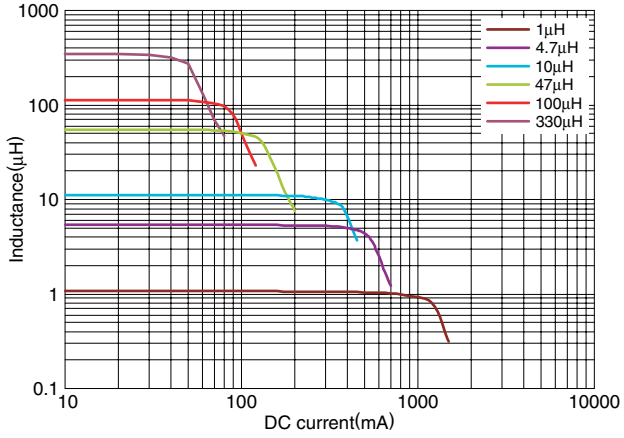
Inductance (µH)	Inductance tolerance	Q ref.	Test frequency L,Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)±20%	Rated current* (mA)max.	Part No.
1	±20%	5	7.96	100	0.06	750	NLFV32T-1R0M-EF
1.5	±20%	5	7.96	80	0.07	600	NLFV32T-1R5M-EF
2.2	±20%	5	7.96	68	0.09	500	NLFV32T-2R2M-EF
3.3	±20%	5	7.96	54	0.11	420	NLFV32T-3R3M-EF
4.7	±20%	5	7.96	46	0.13	360	NLFV32T-4R7M-EF
6.8	±20%	5	7.96	38	0.17	260	NLFV32T-6R8M-EF
10	±10%	10	2.52	30	0.20	250	NLFV32T-100K-EF
15	±10%	10	2.52	26	0.30	140	NLFV32T-150K-EF
22	±10%	10	2.52	21	0.40	120	NLFV32T-220K-EF
33	±10%	10	2.52	17	0.65	95	NLFV32T-330K-EF
47	±10%	10	2.52	14	0.85	90	NLFV32T-470K-EF
68	±10%	10	2.52	12	1.3	70	NLFV32T-680K-EF
100	±10%	25	0.796	10	2.2	55	NLFV32T-101K-EF
150	±10%	25	0.796	8	2.9	50	NLFV32T-151K-EF
220	±10%	25	0.796	7	5.1	40	NLFV32T-221K-EF
330	±10%	25	0.796	5	6.8	35	NLFV32T-331K-EF
470	±10%	25	0.796	4	14.5	30	NLFV32T-471K-EF
680	±10%	25	0.796	3	18.5	25	NLFV32T-681K-EF
1000	±10%	25	0.252	2.4	22.5	20	NLFV32T-102K-EF

* Rated current: Value obtained when current flows and the temperature has risen to 20°C or when DC current flows and the initial value of inductance has fallen by 10%, whichever is smaller.

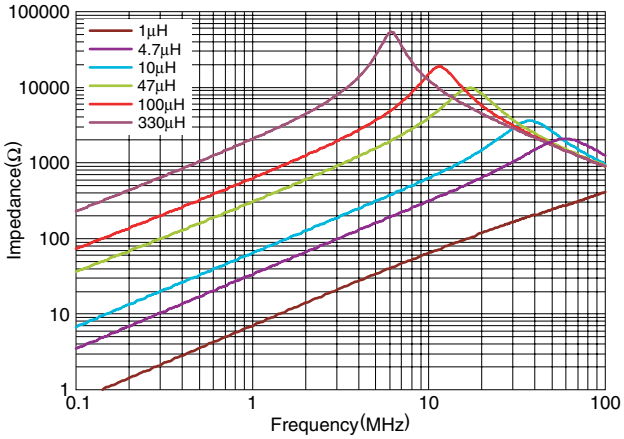
• Test equipment L, Q: HP4194A IMPEDANCE ANALYZER(16085A+16093B+TDK TF-1) or equivalent
SRF: HP8753C NETWORK ANALYZER or equivalent
Rdc: MATSUSHITA VP-2941A DIGITAL MILLIOHM METER or equivalent

TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



IMPEDANCE vs. FREQUENCY CHARACTERISTICS



• All specifications are subject to change without notice.