



**THE DATASHEET OF
NLFC453232T-221K-PF**



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

Conformity to RoHS Directive

NLFC Series NLFC453232

FEATURES

- The NLFC series features magnetic shielding and is recommended for power supply line applications.
- 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 1 μ H to 330 μ H, all of the products are available in the E-6 series.
- It is a product conforming to RoHS directive.

APPLICATIONS

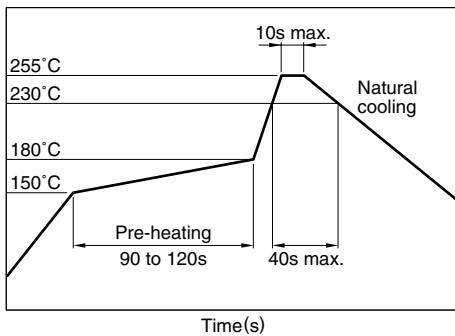
- Electronic equipment used in communication infrastructures including xDSL and mobile base stations.
- Audio-visual equipment including TVs and VCRs.
- Other electronic equipment including HDDs and ODDs.

SPECIFICATIONS

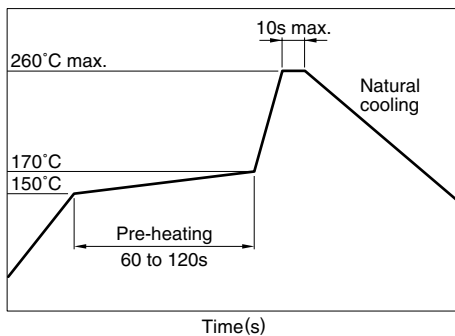
Operating temperature range	-40 to +105°C [Including self-temperature rise]
Storage temperature range	-40 to +105°C

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

NLFC	453232	T-	2R2	M	-	PF
(1)	(2)	(3)	(4)	(5)	(6)	

(1)Series name

(2)Dimensions

453232	4.5×3.2×3.2mm (L×W×T)
--------	-----------------------

(3)Packaging style

T	Taping (reel)
---	---------------

(4)Inductance value

1R0	1 μ H
100	10 μ H
101	100 μ H

(5)Inductance tolerance

K	±10%
M	±20%

(6) Lead-free compatible product

PF	Lead-free compatible product
----	------------------------------

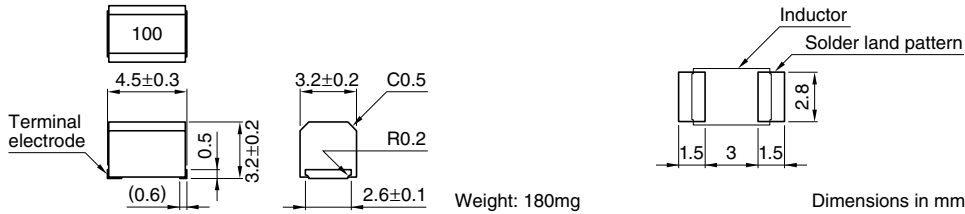
PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	500 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.

SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



ELECTRICAL CHARACTERISTICS

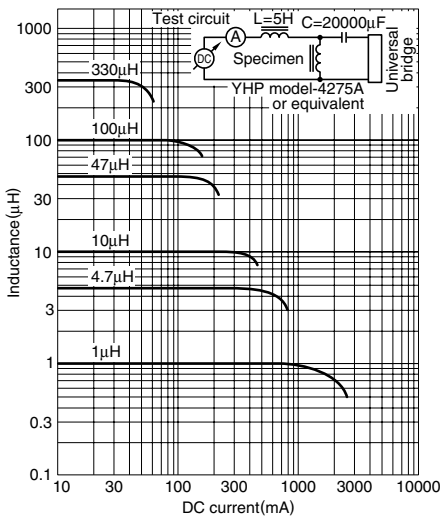
Inductance (μH)	Inductance tolerance	Q ref.	Test frequency L, Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)±30%	Rated current* (mA)max.	Part No.
1	±20%	10	7.96	200	0.05	800	NLFC453232T-1R0M-PF
1.5	±20%	10	7.96	130	0.06	700	NLFC453232T-1R5M-PF
2.2	±20%	10	7.96	80	0.07	600	NLFC453232T-2R2M-PF
3.3	±20%	10	7.96	45	0.09	460	NLFC453232T-3R3M-PF
4.7	±20%	10	7.96	35	0.1	400	NLFC453232T-4R7M-PF
6.8	±20%	10	7.96	28	0.14	300	NLFC453232T-6R8M-PF
10	±10%	10	2.52	22	0.21	250	NLFC453232T-100K-PF
15	±10%	10	2.52	20	0.3	200	NLFC453232T-150K-PF
22	±10%	10	2.52	18	0.46	170	NLFC453232T-220K-PF
33	±10%	10	2.52	14	0.63	140	NLFC453232T-330K-PF
47	±10%	10	2.52	11.5	0.85	120	NLFC453232T-470K-PF
68	±10%	10	2.52	10	1.2	100	NLFC453232T-680K-PF
100	±10%	10	0.796	8	1.7	90	NLFC453232T-101K-PF
150	±10%	10	0.796	7	2.3	65	NLFC453232T-151K-PF
220	±10%	10	0.796	5.5	3.8	55	NLFC453232T-221K-PF
330	±10%	10	0.796	4	6	45	NLFC453232T-331K-PF

* 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.

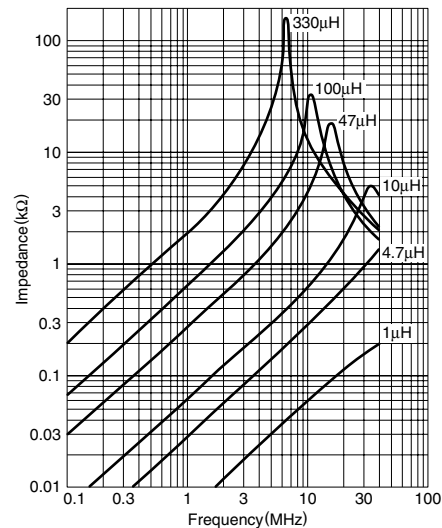
- Test equipment L, Q: YHP4194A IMPEDANCE ANALYZER+YHP16085A+YHP16093B+TF-1, or equivalent
SRF: HP8753C NETWORK ANALYZER (Z_{in}=Z_{out}=50Ω), or equivalent
Rdc: MATSUSHITA VP-2941A DIGITAL MILLIOHM METER, or equivalent

TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS





IMPEDANCE vs. FREQUENCY CHARACTERISTICS



Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  [View NLFC453232T-221K-PF on WIN SOURCE](#)
-  [TDK Corporation](#) Information

Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management