

# **Excellent Integrated System Limited**

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

TDK Corporation NLFC453232T-100K-PF

For any questions, you can email us directly: <u>sales@integrated-circuit.com</u>



**Distributor of TDK Corporation: Excellent Integrated System Limited** Datasheet of NLFC453232T-100K-PF - FIXED IND 10UH 250MA 210 MOHM Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com

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

#### **Conformity to RoHS Directive**

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# 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 1µH to 330µH, all of the products are available in the E-6 series.
- It is a product conforming to RoHS directive.

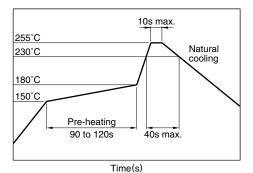
### APPLICATIONS

- 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.

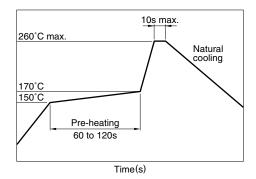
#### SPECIFICATIONS

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	Т-	2R2	М·	- PF
(1)	(2)	(3)	(4)	(5)	(6)

#### (1)Series name

10	D:	•
(2	)Dim	ensions

453232	4.5×3.2×3.2mm (L×W×T)

#### (3)Packaging style

Т	Taping (reel)

#### (4)Inductance value

1R0	1µH	
100	10µH	
101	100µH	

#### (5)Inductance tolerance

PF

К	±10%	
М	±20%	

### (6) Lead-free compatible product

#### PACKAGING STYLE AND QUANTITIES

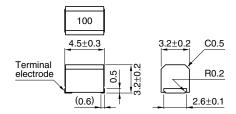
Packaging style	Quantity
Taping	500 pieces/reel

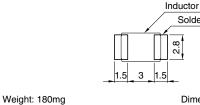
 Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.



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# SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN





Dimensions in mm

Solder land pattern

2.8

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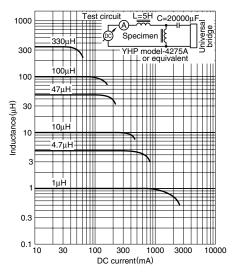
### **ELECTRICAL CHARACTERISTICS**

Inductance	Inductance	Q	Test frequency	Self-resonant frequency	DC resistance	Rated current*	Part No.
<u>(</u> µH)	tolerance	ref.	L, Q (MHz)	(MHz)min.	(Ω)±30%	(mA)max.	Tartivo.
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 (Zin=Zout=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**

