

# **NLCV25T-2R2M-EF Datasheet**



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DiGi Electronics Part Number NLCV25T-2R2M-EF-DG

Manufacturer TDK Corporation

Manufacturer Product Number NLCV25T-2R2M-EF

Description FIXED IND 2.2UH 390MA 650MOHM SM

Detailed Description 2.2 µH Unshielded Drum Core, Wirewound Inducto

r 390 mA 650mOhm Max 1008 (2520 Metric)



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

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## **Purchase and inquiry**

Manufacturer Product Number:	Manufacturer:
NLCV25T-2R2M-EF	TDK Corporation
Series:	Product Status:
NLCV-EF	Active
Type:	Material - Core:
Drum Core, Wirewound	Ferrite
Inductance:	Tolerance:
2.2 μΗ	±20%
Current Rating (Amps):	Current - Saturation (Isat):
390 mA	
Shielding:	DC Resistance (DCR):
Unshielded	650mOhm Max
Q @ Freq:	Frequency - Self Resonant:
20 @ 7.96MHz	95MHz
Ratings:	Operating Temperature:
-	-40°C ~ 105°C
Inductance Frequency - Test:	Mounting Type:
7.96 MHz	Surface Mount
Package / Case:	Supplier Device Package:
1008 (2520 Metric)	1008 (2520 Metric)
Size / Dimension:	Height - Seated (Max):
0.098" L x 0.079" W (2.50mm x 2.00mm)	0.075" (1.90mm)

## **Environmental & Export classification**

8504.50.8000

RoHS Status:	Moisture Sensitivity Level (MSL):
ROHS3 Compliant	1 (Unlimited)
REACH Status:	ECCN:
REACH Unaffected	EAR99
HTSUS:	



Inductors for decoupling circuits **Wound ferrite NLCV-EF** series









## **NLCV25-EF type**













#### **FEATURES**

- Resin mold type wound inductor for decoupling circuits.
- Operating temperature range: -40 to +105°C (including self-temperature rise)

#### **APPLICATION**

O Smart meters, AV equipment, xDSL, electronic devices for communications infrastructure such as mobile base stations, industrial equipment, other

#### **■ PART NUMBER CONSTRUCTION**



#### **CHARACTERISTICS SPECIFICATION TABLE**

L		Q	L, Q measuring frequency	DC resistance	Rated current	Part No.
(µH)	Tolerance	ref.	(MHz)	(Ω)±30%	(mA)max.	
1	±20%	20	7.96	0.34	475	NLCV25T-1R0M-EF
1.5	±20%	20	7.96	0.42	435	NLCV25T-1R5M-EF
2.2	±20%	20	7.96	0.5	390	NLCV25T-2R2M-EF
3.3	±20%	20	7.96	0.65	340	NLCV25T-3R3M-EF
4.7	±20%	20	7.96	0.8	285	NLCV25T-4R7M-EF
6.8	±20%	20	7.96	1	275	NLCV25T-6R8M-EF
10	±10%	30	2.52	1.69	210	NLCV25T-100K-EF
15	±10%	30	2.52	2.2	175	NLCV25T-150K-EF
22	±10%	30	2.52	2.8	160	NLCV25T-220K-EF
33	±10%	30	2.52	4.2	120	NLCV25T-330K-EF

#### Measurement equipment

Measurement item	Product No.	Manufacturer
L, Q	4294A+16093B	Keysight Technologies
DC resistance	AX-114N	ADEX

<sup>\*</sup> Equivalent measurement equipment may be used.

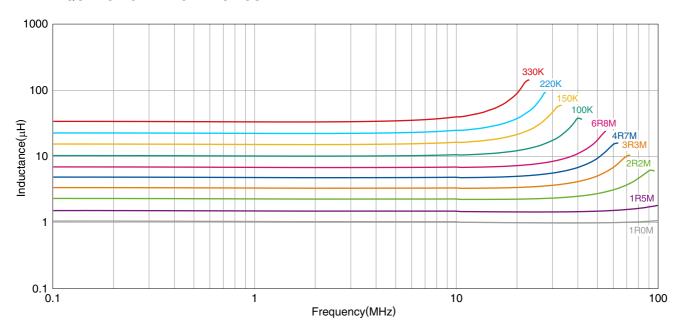






## **NLCV25-EF type**

#### L FREQUENCY CHARACTERISTICS

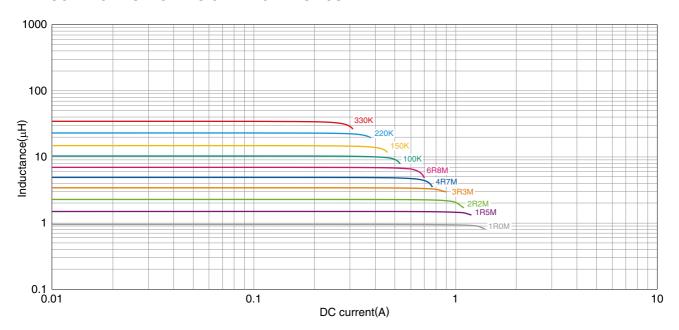


#### Measurement equipment

Product No.	Manufacturer
4294A	Keysight Technologies

<sup>\*</sup> Equivalent measurement equipment may be used.

#### ■INDUCTANCE VS. DC BIAS CHARACTERISTICS



#### Measurement equipment

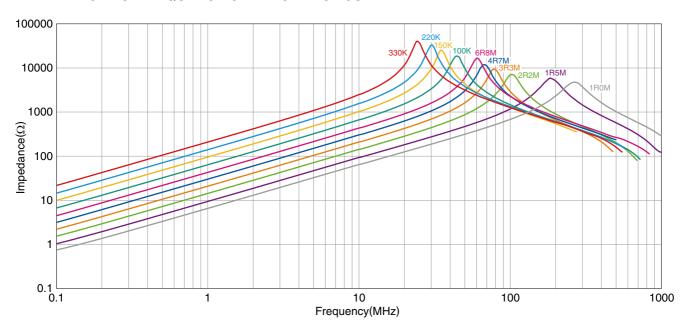
Product No.	Manufacturer
4285A+42841A+42842C	Keysight Technologies

<sup>\*</sup> Equivalent measurement equipment may be used.



# **NLCV25-EF type**

#### **■IMPEDANCE VS. FREQUENCY CHARACTERISTICS**



#### Measurement equipment

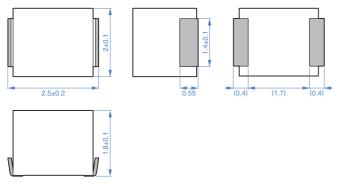
Product No.	Manufacturer
4294A	Keysight Technologies

<sup>\*</sup> Equivalent measurement equipment may be used.



## **NLCV25-EF type**

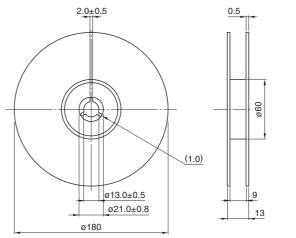
#### SHAPE & DIMENSIONS



Dimensions in mm

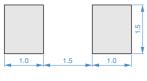
#### **■ PACKAGING STYLE**

#### **REEL DIMENSIONS**



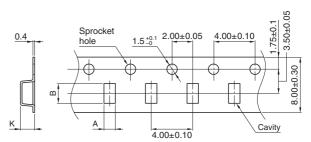
Dimensions in mm

#### ■ RECOMMENDED LAND PATTERN



Dimensions in mm

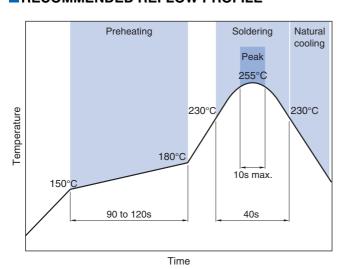
#### **TAPE DIMENSIONS**



Dimensions in mm

Type	Α	В	K
NLCV25-EF	2.3	2.7	2

#### ■ RECOMMENDED REFLOW PROFILE



#### **□PACKAGE QUANTITY**

Package guantity	2000 pcs/reel

#### ■TEMPERATURE RANGE, INDIVIDUAL WEIGHT

Operating temperature range*	Storage temperature range**	Individual weight
-40 to +105 °C	-40 to +105 °C	25 ma

Operating temperature range includes self-temperature rise.

<sup>\*\*</sup> The storage temperature range is for after the assembly.



### REMINDERS FOR USING THESE PRODUCTS

Before using these products, be sure to request the delivery specifications.

### SAFETY REMINDERS

Please pay sufficient attention to the warnings for safe designing when using this products.

## **⚠** REMINDERS The storage period is less than 6 months. Be sure to follow the storage conditions (temperature: 5 to 40°C, humidity: 10 to 75% RH or less). If the storage period elapses, the soldering of the terminal electrodes may deteriorate. On not use or store in locations where there are conditions such as gas corrosion (salt, acid, alkali, etc.). Before soldering, be sure to preheat components. The preheating temperature should be set so that the temperature difference between the solder temperature and chip temperature does not exceed 150°C. Soldering corrections after mounting should be within the range of the conditions determined in the specifications. If overheated, a short circuit, performance deterioration, or lifespan shortening may occur. When embedding a printed circuit board where a chip is mounted to a set, be sure that residual stress is not given to the chip due to the overall distortion of the printed circuit board and partial distortion such as at screw tightening portions. Oself heating (temperature increase) occurs when the power is turned ON, so the tolerance should be sufficient for the set thermal design. Carefully lay out the coil for the circuit board design of the non-magnetic shield type. A malfunction may occur due to magnetic interference. Use a wrist band to discharge static electricity in your body through the grounding wire. On not expose the products to magnets or magnetic fields. O Do not use for a purpose outside of the contents regulated in the delivery specifications. The products listed on this catalog are intended for use in general electronic equipment (AV equipment, telecommunications equipment, home appliances, amusement equipment, computer equipment, personal equipment, office equipment, measurement equipment, industrial robots) under a normal operation and use condition. The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society,

- (1) Aerospace/aviation equipment
- (2) Transportation equipment (cars, electric trains, ships, etc.)
- (3) Medical equipment

person or property.

(4) Power-generation control equipment

set forth in the each catalog, please contact us.

- (5) Atomic energy-related equipment
- (6) Seabed equipment
- (7) Transportation control equipment

- (8) Public information-processing equipment
- (9) Military equipment
- (10) Electric heating apparatus, burning equipment
- (11) Disaster prevention/crime prevention equipment
- (12) Safety equipment
- (13) Other applications that are not considered general-purpose applications

When designing your equipment even for general-purpose applications, you are kindly requested to take into consideration securing protection circuit/device or providing backup circuits in your equipment.

If you intend to use the products in the applications listed below or if you have special requirements exceeding the range or conditions



### **OUR CERTIFICATE**

DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we striciy control the quality of products and services. Welcome your RFQ to Email: Info@DiGi-Electronics.com

















Tel: +00 852-30501935