

Inductors for decoupling circuits Wound ferrite NLCV-EFRD series (for automotive)











NLCV25-EFRD type













FEATURES

- Resin mold type wound inductor for decoupling circuits.
- Operating temperature range: -40 to +125°C (including self-temperature rise)
- Ocompliant with AEC-Q200

APPLICATION

- O Vehicle accessories (car navigation systems, car audio, ETC, other)
- O Application guides: Car Infotainment

PART NUMBER CONSTRUCTION



CHARACTERISTICS SPECIFICATION TABLE

L		Q	L, Q measuring frequency	DC resistance	Rated current	Part No.
(μH)	Tolerance	ref.	(MHz)	(Ω)±20%	(mA)max.	
0.1	±20%	5	25.2	0.04	1890	NLCV25T-R10M-EFRD
0.15	±20%	5	25.2	0.044	1800	NLCV25T-R15M-EFRD
0.22	±20%	5	25.2	0.05	1690	NLCV25T-R22M-EFRD
0.33	±20%	5	25.2	0.065	1480	NLCV25T-R33M-EFRD
0.47	±20%	5	25.2	0.08	1340	NLCV25T-R47M-EFRD
0.68	±20%	5	25.2	0.09	1260	NLCV25T-R68M-EFRD
1	±20%	10	7.96	0.14	1000	NLCV25T-1R0M-EFRD
1.5	±20%	10	7.96	0.18	890	NLCV25T-1R5M-EFRD
2.2	±20%	10	7.96	0.27	730	NLCV25T-2R2M-EFRD
3.3	±20%	10	7.96	0.44	570	NLCV25T-3R3M-EFRD
4.7	±20%	10	7.96	0.57	500	NLCV25T-4R7M-EFRD
6.8	±20%	10	7.96	0.92	390	NLCV25T-6R8M-EFRD
10	+10%	15	2.52	1.1	360	NI CV25T-100K-FFRD

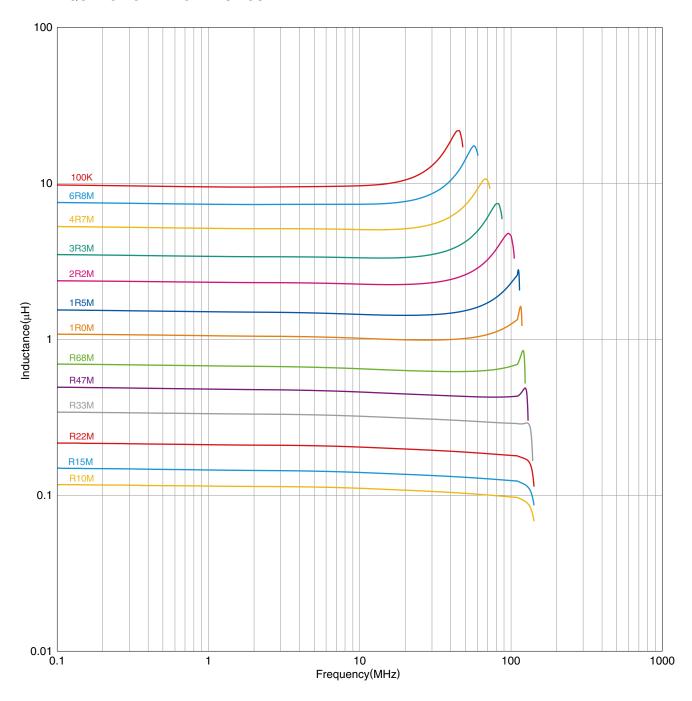
Measurement item	Product No.	Manufacturer
L, Q	4294A+16093B	Keysight Technologies
DC resistance	AX-114N	ADEX

^{*} Equivalent measurement equipment may be used.





L FREQUENCY CHARACTERISTICS

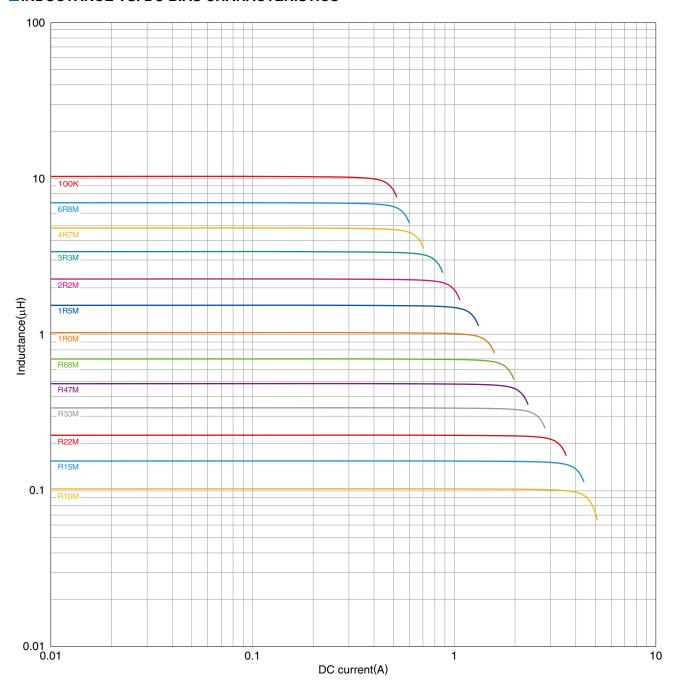


Product No.	Manufacturer
4294A	Keysight Technologies

^{*} Equivalent measurement equipment may be used.



■INDUCTANCE VS. DC BIAS CHARACTERISTICS

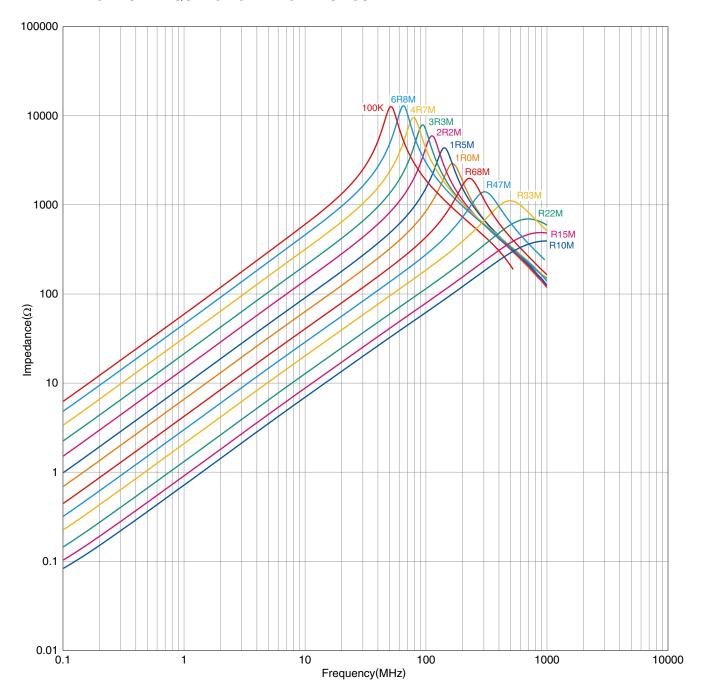


• •	
Product No.	Manufacturer
4285A+42841A+42842C	Keysight Technologies

^{*} Equivalent measurement equipment may be used.



■IMPEDANCE VS. FREQUENCY CHARACTERISTICS

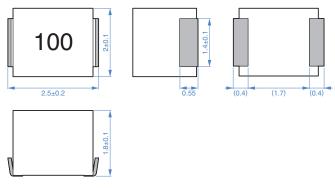


Product No.	Manufacturer
4294A	Keysight Technologies

^{*} Equivalent measurement equipment may be used.



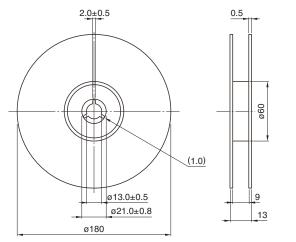
SHAPE & DIMENSIONS



Dimensions in mm

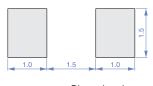
■PACKAGING STYLE

□REEL DIMENSIONS



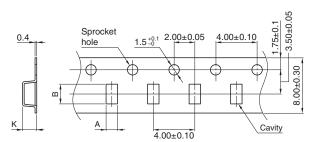
Dimensions in mm

■ RECOMMENDED LAND PATTERN



Dimensions in mm

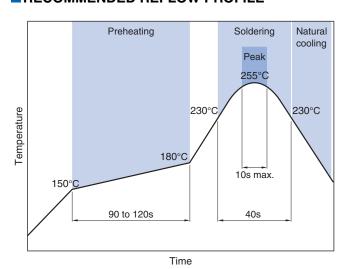
TAPE DIMENSIONS



Dimensions in mm

Type	Α	В	K
NLCV25-EFRD	2.3	2.7	2

■ RECOMMENDED REFLOW PROFILE



PACKAGE QUANTITY

|--|

■TEMPERATURE RANGE, INDIVIDUAL WEIGHT

Operating	Storage	Individual
temperature range*	temperature range**	weight
−40 to +125 °C	−40 to +125 °C	25 mg

Operating temperature range includes self-temperature rise.

^{**} 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 less). If the storage period elapses, the soldering of the terminal electrodes may deteriorate.	75% RH or
Do 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 does not exceed 150°C.	temperature
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 the overall distortion of the printed circuit board and partial distortion such as at screw tightening portions.	chip due to
Self heating (temperature increase) occurs when the power is turned ON, so the tolerance should be sufficient for the design.	set thermal
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.	
Do not expose the products to magnets or magnetic fields.	
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, telecommunical ment, home appliances, amusement equipment, computer equipment, personal equipment, office equipment, measurement, 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 its require a more stringent level of safety or reliability or whose failure, malfunction or trouble could cause serious damage.	ment equip- and/or qual-

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

set forth in the each catalog, please contact us.

(3) Medical equipment

person or property.

- (4) Power-generation control equipment
- (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

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Fixed Inductors category:

Click to view products by TDK manufacturer:

Other Similar products are found below:

MLZ1608M6R8WTD25 MLZ1608N6R8LT000 MLZ1608N3R3LTD25 MLZ1608N3R3LTD00 MLZ1608N150LT000 MLZ1608N150WTD05 MLZ1608M3R3WTD25 MLZ1608M3R3WT000 MLZ1608M150WT000 MLZ1608A1R5WT000 MLZ1608N1R5LT000 B82432C1333K000 PCMB053T-1R0MS PCMB053T-1R5MS PCMB104T-1R5MS CR32NP-100KC CR32NP-151KC CR32NP-180KC CR32NP-181KC CR32NP-1R5MC CR32NP-390KC CR32NP-390KC CR32NP-389MC CR32NP-680KC CR32NP-820KC CR32NP-8R2MC CR43NP-390KC CR43NP-560KC CR43NP-680KC CR54NP-181KC CR54NP-470LC CR54NP-820KC CR54NP-8R5MC MGDQ4-00004-P MGDU1-00016-P MHL1ECTTP18NJ MHL1JCTTD12NJ PE-51506NL PE-53601NL PE-53630NL PE-53824SNLT PE-62892NL PE-92100NL PG0434.801NLT PG0936.113NLT PM06-2N7 PM06-39NJ HC2LP-R47-R HC2-R47-R HC3-2R2-R HC8-1R2-R