



Inductors — NLFC, NLV, NLHV, NLCV, FLF, NLFV, NLC, NL and CPL Series



NLFC Series: This product has good heat durability that withstands lead-free compatible reflow soldering conditions. Lead-free materials are used for the plating on the terminal. The NLFC series features magnetic shielding and is recommended for power supply line applications. DC Res: ±30% **Operating Temperature:** -40°C - 85°C (-40°F - 185°F)

NLV Series: This product supports lead-free solder reflow condition. Lead-free materials are used to terminal plating. This product uses metal terminal, therefore it is high connection reliability. They are wire wound **Operating Temperature:** -40°C - 85°C (-40°F - 185°F)

NLCV Series: Lead-free materials are used to terminal plating in this product. **Applications:** • Universal inductance circuit use • AV components • Car electronics • IT equipment This series is a large current type: 1.0 - 33 µH (NLCV32: 1.0 - 330 µH) DC Res: ±30% **Operating Temperature:** -40°C - 85°C (-40°F - 185°F)

FLF Series: Features: • It delivers low Rdc with high Idc. • It is able to withstand high temperature reflows (260°C during the peak) used in lead-free soldering. **Applications:** • Information electrical appliance equipment (HDD) • Information electrical appliance equipment (W_LAN) • Portable Phone Equipment (Digital Cellular) • Portable AV Equipment (DSC, DVC, AUDIO, etc.) **Operating Temperature:** -40°C - 125°C (-40°F - 257°F)

NLHV Series: High Q-Factor is provided in frequency band more than 30MHz **Applications:** • Power supply lines • Audio visual systems • Electronic equipment for vehicles • IT equipment **Operating Temperature:** -40°C - 105°C (-40°F - 221°F)

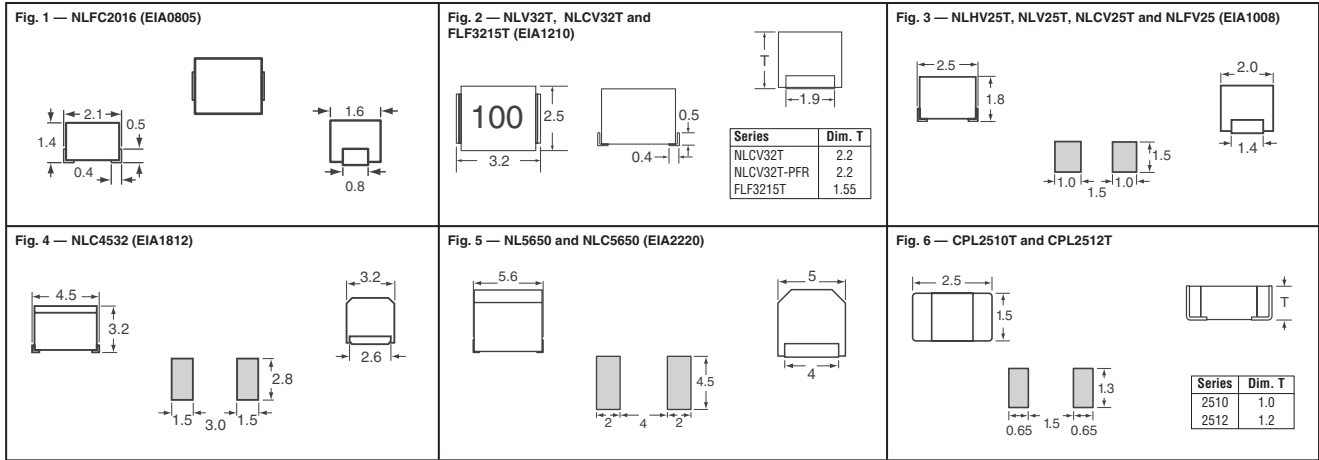
NLFV Series: Provides low DC resistance while using 252018 size winding construction **Applications:** • PCs • Hard disk drives • Other types of electronics DC Res: ±20% **Operating Temperature:** -20°C - 85°C (-4°F - 185°F) **PFR Series Operating Temperature:** -40°C - 125°C

NLC4532 Series: Designed to be used on power lines and support rated current in the range from 90 - 150mA. NLC Series has only half as much DC resistance and twice as much DC current. **Operating Temperature:** -40°C - 105°C (-40°F - 221°F)

NL Series: Features good heat durability that withstands lead-free compatible reflow soldering conditions. Uses metal terminals, which realize excellent connection reliability **Applications:** • Electronic equipment used in communication infrastructures including xDSL and mobile base stations • Electronic equipment used in onboard automobile equipment including car audio and ECU systems • Audio visual equipment including TVs and VCRs • Other electronic equipment including HDDs and ODDs

CPL Series: Delivers low Rdc with high Idc and able to withstand high temperature reflows (260°C during the peak) used in lead-free soldering **Applications:** • Portable audio visual devices (DSCs and DVCs) • Mobile communication devices (cellular phones) • Information devices (PCs). **Operating Temperature:** -40°C - 105°C (-40°F - 221°F)

Dimensions in mm



Inductance (µH)	Inductance Tol.	Test Freq. (MHz)	DC Res. (Ω)	Rated Current (Max. mA)	SRF (MHz)	Digi-Key Part No.	Cut Tape Pricing (1 10 100)	Tape and Reel Pricing (2,000)	TDK Part No.
Fig. 1 — NLFC2016 Series									
2.2	±20%	7.96	0.23	240	80	445-1899-1-ND	.73 6.73 56.11	—	NLFC201614T-2R2M-PF
Fig. 2 — NLV32T Series									
0.010	±5%	100	0.13	450	2500	445-1505-1-ND	.33 2.72 21.68	101.01/M	NLV32T-010J-PF
0.047	±5%	100	0.30	450	1200	445-1509-1-ND	.33 2.72 21.68	101.01/M	NLV32T-047J-PF
0.15	±5%	25.2	0.25	450	450	445-1512-1-ND	.33 2.72 21.68	101.01/M	NLV32T-R15J-PF
0.22	±5%	25.2	0.32	450	350	445-1513-1-ND	.33 2.72 21.68	101.01/M	NLV32T-R22J-PF
0.33	±5%	25.2	0.40	450	300	445-1514-1-ND	.33 2.72 21.68	101.01/M	NLV32T-R33J-PF
0.47	±5%	25.2	0.50	450	220	445-1515-1-ND	.33 2.72 21.68	101.01/M	NLV32T-R47J-PF
0.68	±5%	25.2	0.60	450	160	445-1516-1-ND	.33 2.72 21.68	101.01/M	NLV32T-R68J-PF
1.0	±5%	7.96	0.70	400	120	445-1517-1-ND	.33 2.72 21.68	101.01/M	NLV32T-R10J-PF
2.2	±5%	7.96	1.00	320	75	445-1519-1-ND	.33 2.72 21.68	101.01/M	NLV32T-R22J-PF
3.3	±5%	7.96	1.20	260	60	445-1520-1-ND	.33 2.72 21.68	101.01/M	NLV32T-R33J-PF
4.7	±5%	7.96	1.50	220	50	445-1521-1-ND	.33 2.72 21.68	101.01/M	NLV32T-4R7J-PF
10	±5%	2.52	2.10	150	30	445-1523-1-ND	.33 2.72 21.68	101.01/M	NLV32T-100J-PF
22	±5%	2.52	3.70	110	20	445-1525-1-ND	.33 2.72 21.68	101.01/M	NLV32T-220J-PF
47	±5%	2.52	7.00	60	15	445-1527-1-ND	.33 2.72 21.68	101.01/M	NLV32T-470J-PF
68	±5%	2.52	9.00	50	12	445-1528-1-ND	.33 2.72 21.68	101.01/M	NLV32T-680J-PF
100	±5%	0.796	10.00	40	10	445-1529-1-ND	.33 2.72 21.68	101.01/M	NLV32T-101J-PF
220	±5%	0.796	21.00	50	7	445-1531-1-ND	.33 2.72 21.68	101.01/M	NLV32T-221J-PF
330	±5%	0.796	34.00	40	5	445-1532-1-ND	.33 2.72 21.68	101.01/M	NLV32T-331J-PF
470	±5%	0.796	40.00	25	4	445-1533-1-ND	.33 2.72 21.68	101.01/M	NLV32T-471J-PF
Fig. 2 — NLCV32T Series									
1.0	±20%	7.96	0.06	1000	100	445-1534-1-ND	.33 2.72 21.68	94.85/M	NLCV32T-1R0M-PF
1.5	±20%	7.96	0.11	830	80	445-1535-1-ND	.33 2.72 21.68	94.85/M	NLCV32T-1R5M-PF
2.2	±20%	7.96	0.13	770	68	445-1536-1-ND	.33 2.72 21.68	94.85/M	NLCV32T-2R2M-PF
3.3	±20%	7.96	0.16	690	54	445-1537-1-ND	.33 2.72 21.68	94.85/M	NLCV32T-3R3M-PF
10	±10%	2.52	0.36	450	30	445-1538-1-ND	.33 2.72 21.68	94.85/M	NLCV32T-100K-PF
15	±10%	2.52	0.56	370	26	445-1539-1-ND	.33 2.72 21.68	94.85/M	NLCV32T-150K-PF
22	±10%	2.52	0.77	300	21	445-1540-1-ND	.33 2.72 21.68	94.85/M	NLCV32T-220K-PF
33	±10%	2.52	1.10	240	17	445-1541-1-ND	.33 2.72 21.68	94.85/M	NLCV32T-330K-PF
47	±10%	2.52	1.64	180	14	445-1542-1-ND	.33 2.72 21.68	94.85/M	NLCV32T-470K-PF
100	±10%	0.796	3.70	120	10	445-1543-1-ND	.33 2.72 21.68	94.85/M	NLCV32T-101K-PF
150	±10%	0.796	6.10	100	8	445-1544-1-ND	.33 2.72 21.68	94.85/M	NLCV32T-151K-PF
220	±10%	0.796	8.40	80	7	445-1545-1-ND	.33 2.72 21.68	94.85/M	NLCV32T-221K-PF
330	±10%	0.796	12.3	70	6	445-1546-1-ND	.33 2.72 21.68	94.85/M	NLCV32T-331K-PF

Inductance (µH)	Inductance Tol.	Test Freq. (MHz)	DC Res. (Ω)	Rated Current (Max. mA)	SRF (MHz)	Digi-Key Part No.	Cut Tape Pricing (1 10 100)	Tape and Reel Pricing (2,000)	TDK Part No.
Fig. 2 — NLCV32T-PFR Series									
0.1	±20%	25.2	0.02	2850	600	445-3642-1-ND	.37 3.09 24.69	107.73/M	NLCV32T-R10M-PFR
0.15	±20%	25.2	0.024	2600	500	445-3643-1-ND	.37 3.09 24.69	107.73/M	NLCV32T-R15M-PFR
0.22	±20%	25.2	0.027	2400	400	445-3644-1-ND	.37 3.09 24.69	107.73/M	NLCV32T-R22M-PFR
0.33	±20%	25.2	0.035	2100	300	445-3645-1-ND	.37 3.09 24.69	107.73/M	NLCV32T-R33M-PFR
0.47	±20%	25.2	0.038	2000	250	445-3646-1-ND	.37 3.09 24.69	107.73/M	NLCV32T-R47M-PFR
0.68	±20%	25.2	0.045	1900	180	445-3647-1-ND	.37 3.09 24.69	107.73/M	NLCV32T-R68M-PFR
1.0	±20%	7.96	0.055	1700	100	445-3648-1-ND	.37 3.09 24.69	107.73/M	NLCV32T-1R0M-PFR
1.5	±20%	7.96	0.095	1400	80	445-3649-1-ND	.37 3.09 24.69	107.73/M	NLCV32T-1R5M-PFR
2.2	±20%	7.96	0.115	1200	68	445-3650-1-ND	.37 3.09 24.69	107.73/M	NLCV32T-2R2M-PFR
3.3	±20%	7.96	0.16	1000	54	445-3651-1-ND	.37 3.09 24.69	107.73/M	NLCV32T-3R3M-PFR
4.7	±20%	7.96	0.2	900	46	445-3652-1-ND	.37 3.09 24.69	107.73/M	NLCV32T-4R7M-PFR
6.8	±20%	7.96	0.29	700	38	445-3653-1-ND	.37 3.09 24.69	107.73/M	NLCV32T-6R8M-PFR
10	±10%	2.52	0.42	600	30	445-3654-1-ND	.37 3.09 24.69	107.73/M	NLCV32T-100K-PFR
Fig. 2 — FLF3215T Series									
0.47	±30%	1	0.021	2800	200	445-4843-1-ND	.67 5.61 44.89	196.38/M	FLF3215T-R47N
1.0	±30%	1	0.03	2000	100	445-4844-1-ND	.67 5.61 44.89	196.38/M	FLF3215T-1R0N
2.2	±20%	1	0.05	1400	60	445-4845-1-ND	.67 5.61 44.89	196.38/M	FLF3215T-2R2M
4.7	±20%	1	0.09	1000	40	445-4846-1-ND	.67 5.61 44.89	196.38/M	FLF3215T-4R7M
10	±20%	1	0.20	700	25	445-4847-1-ND	.67 5.61 44.89	196.38/M	FLF3215T-100M
22	±20%	1	0.45	450	14	445-4848-1-ND	.67 5.61 44.89	196.38/M	FLF3215T-220M
Fig. 3 — NLHV25T Series									
0.12	±5%	25.2	0.38	550	700	445-3631-1-ND	.34 2.81 22.44	105.16/M	NLHV25T-R12J-PF
0.15	±5%	25.2	0.42	500	550	445-3632-1-ND	.34 2.81 22.44	105.16/M	NLHV25T-R15J-PF
0.18	±5%	25.2	0.45	475	500	445-3633-1-ND	.34 2.81 22.44	105.16/M	NLHV25T-R18J-PF
0.22	±5%	25.2	0.5	450	450	445-3634-1-ND	.34 2.81 22.44	105.16/M	NLHV25T-R22J-PF
0.27	±5%	25.2	0.58	425	425	445-3635-1-ND	.34 2.81 22.44	105.16/M	NLHV25T-R27J-PF
0.33	±5%	25.2	0.68	400	400	445-3636-1-ND	.34 2.81 22.44	105.16/M	NLHV25T-R33J-PF
0.39	±5%	25.2	0.73	375	375	445-3637-1-ND	.34 2.81 22.44	105.16/M	NLHV25T-R39J-PF
0.47	±5%	25.2	0.83	350	350	445-3638-1-ND	.34 2.81 22.44	105.16/M	NLHV25T-R47J-PF
0.56	±5%	25.2	0.93	325	325	445-3639-1-ND	.34 2.81 22.44	105.16/M	NLHV25T-R56J-PF
0.68	±5%	25.2	0.98	300	180	445-3640-1-ND	.34 2.81 22.44	105.16/M	NLHV25T-R68J-PF
0.82	±5%	25.2	1.05	280	120	445-3641-1-ND	.34 2.81 22.44	105.16/M	NLHV25T-R82J-PF
Fig. 3 — NLV25T Series									
0.01	±5%	100	0.26	530	2150	445-1701-1-ND	.30 2.49 19.93	92.85/M	NLV25T-010J-PF

† For Tape and Reel part number, change 1-ND to 2-ND.

(Continued)

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