

[Commercial Grade] Inductors for Standard Circuits/Decoupling Circuits



| Multilayer | MLF1005V | | | | | MLF1005G | | | | | MLF1608 | | | | | MLF2012 | | | | | | |
|------------|----------------------|---------|------------------------------------|-------------------|-------------------|----------------------------|----------------------|------------------------------------|-------------------|-------------------|----------------------------|----------------------|------------------------------------|-------------------|-------------------|----------------------------|---|------------------------------------|-------------------|-------------------|----------------------------|------|
| | L x W T [mm] | L [µH] | Measuring condition Freq. [MHz] | SRF Min. [MHz] | RDC Max. [ohm] | Rated Current Max. [mA] | L [µH] | Measuring condition Freq. [MHz] | SRF Min. [MHz] | RDC Max. [ohm] | Rated Current Max. [mA] | L [µH] | Measuring condition Freq. [MHz] | SRF Min. [MHz] | RDC Max. [ohm] | Rated Current Max. [mA] | L [µH] | Measuring condition Freq. [MHz] | SRF Min. [MHz] | RDC Max. [ohm] | Rated Current Max. [mA] | |
| | 1.00x0.50 0.55Max | | | | | | 1.00x0.50 0.55Max | | | | | 1.60x0.80 0.95Max | | | | | 2.00x1.25 1.05Max (0.047uH to 0.39uH / 1.0 to 2.2uH) 1.45Max (0.47uH to 0.82uH / 2.7uH to 12uH) | | | | | |
| MLF Series | 0.047 | ±5%±10% | 25 | 450 | 0.51 | 180 | 0.047 | ±20% | 50 | 600 | 0.20 | 200 | 0.047 | ±20% | 50 | 550 | 0.10 | 300 | ±20% | 50 | 550 | 0.10 |

| Multilayer | MLJ1005 | | | | | MLJ1608 | | | | | |
|------------|----------------------|---------|------------------------------------|-------------------|-------------------|----------------------------|----------------------|------------------------------------|-------------------|-------------------|----------------------------|
| | L x W T [mm] | L [µH] | Measuring condition Freq. [MHz] | SRF Min. [MHz] | RDC Max. [ohm] | Rated Current Max. [mA] | L [µH] | Measuring condition Freq. [MHz] | SRF Min. [MHz] | RDC Max. [ohm] | Rated Current Max. [mA] |
| | 1.00x0.50 0.55Max | | | | | | 1.60x0.80 0.95Max | | | | |
| MLJ Series | 0.075 | ±5%±10% | 25 | 650 | 0.25 | 500 | 0.075 | ±20% | 50 | 600 | 0.25 |

| Wire Wound | NLFV25 | | | | NLFV32 | | | | | | |
|-------------|----------------------|----------|------------------------------------|-------------------|-------------------|----------------------------|----------------------|------------------------------------|-------------------|-------------------|----------------------------|
| | L x W T [mm] | L [µH] | Measuring condition Freq. [MHz] | SRF Min. [MHz] | RDC Max. [ohm] | Rated Current Max. [mA] | L [µH] | Measuring condition Freq. [MHz] | SRF Min. [MHz] | RDC Max. [ohm] | Rated Current Max. [mA] |
| | 2.50x2.00 1.90Max | | | | | | 3.20x2.50 2.40Max | | | | |
| NLFV Series | 1.0 | ±10%±20% | 7.96 | 100 | 0.07 | 455 | 1.0 | ±10%±20% | 7.96 | 100 | 0.06 |

| Multilayer | MLZ1005-W | | | | MLZ1608-W | | | | MLZ1608-L | | | | MLZ1608-D | | | | MLZ2012-W | | | | MLZ2012-L | | | | MLZ2012-D | | | | MLZ2012-H | | | |
|------------|----------------------|-------------------|---|----------------------------------|-----------|------------------------------------|-------------------|-------------------|----------------------------|----------------------|------------------------------------|-------------------|-------------------|----------------------------|----------------------|------------------------------------|-------------------|-------------------|----------------------------|--------|---------------------------------------|-------------------|-------------------|----------------------------|-----------|---------------------------------------|-------------------|-------------------|----------------------------|--|--|--|
| | L x W T [mm] | RDC Typ. [ohm] | Isat L(nominal) 50% Down Max. [mA] | Itemp 20deg Rise Max. [mA] | L [µH] | Measuring condition Freq. [MHz] | SRF Min. [MHz] | RDC Max. [ohm] | Rated Current Max. [mA] | L [µH] | Measuring condition Freq. [MHz] | SRF Min. [MHz] | RDC Max. [ohm] | Rated Current Max. [mA] | L [µH] | Measuring condition Freq. [MHz] | SRF Min. [MHz] | RDC Max. [ohm] | Rated Current Max. [mA] | L [µH] | Measuring condition Freq. [MHz] | SRF Min. [MHz] | RDC Max. [ohm] | Rated Current Max. [mA] | L [µH] | Measuring condition Freq. [MHz] | SRF Min. [MHz] | RDC Max. [ohm] | Rated Current Max. [mA] | | | |
| | 1.00x0.50 0.55Max | | | | | | | | | 1.60x0.80 0.95Max | | | | | 1.60x0.80 0.95Max | | | | | | 2.00x1.25 1.05Max (1.0uH to 4.7uH) | | | | | 2.00x1.25 1.05Max (1.0uH to 6.8uH) | | | | | | |
| MLZ Series | 0.10 | | | | 0.10 | | | | | 0.14 | 700 | 850 | 600 | 0.10 | 0.10 | 280 | 900 | 1.05 | 0.06 | 220 | 1150 | 1.05 | | | 0.10 | 700 | 800 | 1.45 | | | | |

| Wire Wound | NLV25 | | | | NLV32 | | | | | | |
|------------|----------------------|----------|------------------------------------|-------------------|-------------------|----------------------------|----------------------|------------------------------------|-------------------|-------------------|----------------------------|
| | L x W T [mm] | L [µH] | Measuring condition Freq. [MHz] | SRF Min. [MHz] | RDC Max. [ohm] | Rated Current Max. [mA] | L [µH] | Measuring condition Freq. [MHz] | SRF Min. [MHz] | RDC Max. [ohm] | Rated Current Max. [mA] |
| | 2.50x2.00 1.90Max | | | | | | 3.20x2.50 2.40Max | | | | |
| NLV Series | 0.010 | ±10%±20% | 100 | 2150 | 0.26 | 530 | 0.010 | ±10%±20% | 100 | 2500 | 0.13 |

| Wire Wound | NLCV25 | | | | NLCV32 | | | | NLCV25T-R | | | | NLCV32T-R | | | |
|-------------|----------------------|----------|------------------------------------|-------------------|-------------------|----------------------------|----------------------|------------------------------------|-------------------|-------------------|----------------------------|----------------------|------------------------------------|-------------------|-------------------|----------------------------|
| | L x W T [mm] | L [µH] | Measuring condition Freq. [MHz] | SRF Min. [MHz] | RDC Max. [ohm] | Rated Current Max. [mA] | L [µH] | Measuring condition Freq. [MHz] | SRF Min. [MHz] | RDC Max. [ohm] | Rated Current Max. [mA] | L [µH] | Measuring condition Freq. [MHz] | SRF Min. [MHz] | RDC Max. [ohm] | Rated Current Max. [mA] |
| | 2.50x2.00 1.90Max | | | | | | 3.20x2.50 2.40Max | | | | | 2.50x2.00 1.90Max | | | | |
| NLCV Series | 1.0 | ±10%±20% | 7.96 | 200 | 0.34 | 475 | 1.0 | ±10%±20% | 7.96 | 100 | 0.06 | 1000 | 0.10 | 25.2 | 800 | 0.04 |

| Wire Wound | NL453232 | | | | | |
|------------|----------------------|----------|------------------------------------|-------------------|-------------------|----------------------------|
| | L x W T [mm] | L [µH] | Measuring condition Freq. [MHz] | SRF Min. [MHz] | RDC Max. [ohm] | Rated Current Max. [mA] |
| | 4.50x3.20 3.40Max | | | | | |
| NL Series | 1.0 | ±10%±20% | 7.96 | 100 | 0.5 | 450 |

| Wire Wound | NLC453232 | | | | | |
|------------|----------------------|----------|------------------------------------|-------------------|-------------------|----------------------------|
| | L x W T [mm] | L [µH] | Measuring condition Freq. [MHz] | SRF Min. [MHz] | RDC Max. [ohm] | Rated Current Max. [mA] |
| | 4.50x3.20 3.40Max | | | | | |
| NLC Series | 1.0 | ±10%±20% | 7.96 | 200 | 0.11 | 1050 |

Isat : Depend on the inductance saturation.
Itemp : Depend on the self temperature rise.

MLP Series table with columns for Multilayer, MLP1005M-D, MLP1608V-D, MLP1608H-B, MLP1608V-B, MLP2012V-T, MLP2012S-T, MLP2012H-M, MLP2012V-M, MLP2012S-M, MLP2016H-M, MLP2016V-M, MLP2016S-M. Includes sub-headers for L x W [mm], T [mm], RDC, Isat, Itemp, L [uH], Typ. [mQ], L(nominal) 30% Down Typ.[A], 40deg Rise Max.[A].

MLP Series table with columns for Multilayer, MLP2520W-M, MLP2520H-M, MLP2520V-M, MLP2520S-M, MLP2520V-S, MLP2520S-S. Includes sub-headers for L x W [mm], T [mm], RDC, Isat, Itemp, L [uH], Typ. [mQ], L(nominal) 30% Down Typ.[A], 40deg Rise Max.[A].

Thin Film table with columns for Thin Film, TFM160808ALC, TFM201608ALC, TFM201610ALC, TFM201610ALM, TFM201610GHM. Includes sub-headers for L x W [mm], T [mm], RDC, Isat, Itemp, L [uH], Max. [mQ], L(nominal) 30% Down Max.[A], 40deg Rise Max.[A].

SPM-LR Series table with columns for Wire Wound, SPM3010-LR, SPM3012-LR, SPM3015-LR, SPM3020-LR, SPM4010-LR, SPM4012-LR, SPM4015-LR, SPM4020-LR, SPM5010-LR, SPM5012-LR, SPM5015-LR, SPM5020-LR. Includes sub-headers for L x W [mm], T [mm], RDC, Isat, Itemp, L [uH], Typ. [mQ], L(initial) 30% Down Typ.[A], 40deg Rise Typ.[A].

SPM Series table with columns for Wire Wound, SPM4030, SPM5030, SPM6530, SPM6550, SPM6550C, SPM10040. Includes sub-headers for L x W [mm], T [mm], RDC, Isat, Itemp, L [uH], Typ. [mQ], L(initial) 20% Down Typ.[A], 40deg Rise Typ.[A].

SPM-XT Series table with columns for Wire Wound, SPM10040XT, SPM12565XT. Includes sub-headers for L x W [mm], T [mm], RDC, Isat, Itemp, L [uH], Typ. [mQ], L(initial) 20% Down Typ.[A], 40deg Rise Typ.[A].

VLS-HBU Series table with columns for Wire Wound, VLS252010HBU, VLS252012HBU. Includes sub-headers for L x W [mm], T [mm], RDC, Isat, Itemp, L [uH], Max. [mQ], L(initial) 30% Down Max.[A], 40deg Rise Max.[A].

Isat : Depend on the inductance saturation. Itemp : Depend on the self temperature rise.

Table with columns for Wire Wound and various series: VLS201610HBX-1, VLS201612HBX-1, VLS252010HBX-1, VLS252012HBX-1, VLS3012HBX, VLS4012HBX. Includes parameters like L, RDC, Isat, and Itemp.

Table for Wire Wound VLSB Series (VLBS1007083) with columns for L, RDC, Isat, Itemp.

* T: 8.40mm for 0.10uH.

Table for Wire Wound VLB Series (VLBU6565100, VLBU1007090) with columns for L, RDC, Isat, Itemp.

* L x W : 10.0 x 7.10 mm Max. for 0.10uH and 12uH.

Table with columns for Wire Wound and various series: VLS201610CX-1, VLS201612CX-1, VLS252010CX-1, VLS252012CX-1, VLS3012CX-1, VLS3015CX-1. Includes parameters like L, RDC, Isat, Itemp.

Table for Wire Wound VLS-AF Series (VLS6045AF) with columns for L, RDC, Isat, Itemp.

Table for Wire Wound VLB Series (VLB7050, VLB10050, VLB12065) with columns for L, RDC, Isat, Itemp.

Table for Wire Wound VLS-EX Series (VLS5045EX, VLS6045EX) with columns for L, RDC, Isat, Itemp.

Table for Wire Wound VLCF Series (VLCF4018-2, VLCF4020, VLCF4024-2, VLCF4028-2, VLCF5020, VLCF5020-1, VLCF5020-3, VLCF5024-2, VLCF5028-2) with columns for L, RDC, Isat, Itemp.

Table for Wire Wound SLF Series (SLF6025-PF, SLF6028-PF, SLF6045-3PF, SLF7032-2PF, SLF7045-PF, SLF7055-3PF, SLF10145-PF, SLF10165-3PF, SLF12555-PF, SLF12565-PF, SLF12575-PF) with columns for L, RDC, Isat, Itemp.

Isat : Depend on the inductance saturation. Itemp : Depend on the self temperature rise.