



MLP Series Power Inductor Kit

Commercial Grade Power Inductor Sample Kit

TDK's MLP Series Inductors are multilayer inductors with a ferrite core designed for use in power circuits. A low-loss material is used to contribute to overall efficiency of the power circuit. The MLP Series Power Inductors are offered in a variety of product characteristics (which varies with case size). 'H' type product has low DC resistance and is optimal for when heavy load power efficiency is important. 'V' type product has good DC superimposition type characteristics and is optimal for when light load power efficiency is important. 'S' type product is the standard product type that includes a wide inductance value range and various sizes. 'W' type product has low DC resistance and large current.



Features

- Magnetically shielded, multilayer inductor with ferrite core
- Conforms to RoHS directive, halogen free, & compatible with lead-free soldering
- Standard operating temperature range of -40°C to $+125^{\circ}\text{C}$
- Storage temperature range of -40°C to $+85^{\circ}\text{C}$ (after PC board mounting)

Ferrite Core

Commercial

Power



Applications

- Smart phones
- HDDs, SSDs, DVCs, DSCs
- Portable game devices
- Tablet Terminals
- Mobile display panels
- Compact power supply modules

[MLP1608](#)

[MLP2012](#)

[MLP2016](#)

[MLP2520](#)

MLP Series Power Inductor Kit Includes:

Case Sizes: 1608, 2012, 2016, 2520 (EIA 0603, 0805, 0806, 1008)

Inductance Range: 470nH-10 μ H

Current Rating (max.): 0.6-1.7A

DC Resistance (max.): 68.75-468m Ω

Kit contains 125 pieces total—5 pieces per value

Now Available at:



445-174887-KIT-ND

Click the link above for ordering information.

MLP Series Power Inductors Kit Includes:

| Digi-Key Part Number | TDK Part Number | Case Size Inductance Value Tol |
|----------------------|----------------------------|--------------------------------|
| 445-174887-KIT-ND | MLP1608H2R2BT0S1 | 1608 2.2 μ H \pm 20% |
| | MLP1608V1R0BT0S1 | 1608 1 μ H \pm 20% |
| | MLP1608V1R0DT0S1 | 1608 1 μ H \pm 20% |
| | MLP1608V2R2BT0S1 | 1608 2.2 μ H \pm 20% |
| | MLP2012H2R2MT0S1 | 2012 2.2 μ H \pm 20% |
| | MLP2012HR54MT0S1 | 2012 540nH \pm 20% |
| | MLP2012S1R5MT0S1 | 2012 1.5 μ H \pm 20% |
| | MLP2012S2R2MT0S1 | 2012 2.2 μ H \pm 20% |
| | MLP2012S3R3MT0S1 | 2012 3.3 μ H \pm 20% |
| | MLP2012S4R7MT0S1 | 2012 4.7 μ H \pm 20% |
| | MLP2012V2R2MT0S1 | 2012 2.2 μ H \pm 20% |
| | MLP2016H2R2MT0S1 | 2016 2.2 μ H \pm 20% |
| | MLP2016HR47MT0S1 | 2016 470nH \pm 20% |
| | MLP2016S1R0MT0S1 | 2016 1 μ H \pm 20% |
| | MLP2016S1R5MT0S1 | 2016 1.5 μ H \pm 20% |
| | MLP2016S2R2MT0S1 | 2016 2.2 μ H \pm 20% |
| | MLP2016S4R7MT0S1 | 2016 4.7 μ H \pm 20% |
| | MLP2016V2R2MT0S1 | 2016 2.2 μ H \pm 20% |
| | MLP2520S100MT0S1 | 2520 10 μ H \pm 20% |
| | MLP2520S1R0MT0S1 | 2520 1 μ H \pm 20% |
| | MLP2520S2R2MT0S1 | 2520 2.2 μ H \pm 20% |
| | MLP2520S3R3ST0S1 | 2520 3.3 μ H \pm 20% |
| | MLP2520S4R7MT0S1 | 2520 4.7 μ H \pm 20% |
| MLP2520S4R7ST0S1 | 2520 4.7 μ H \pm 20% | |
| MLP2520V3R3MT0S1 | 2520 3.3 μ H \pm 20% | |

PART NUMBER CONSTRUCTION

| MLP | 2520 | | W | R47 | | M | T | | OS1 | | |
|-------------|---------------------|---------|---------------------|--|-----------------------|------|------------------|-----|-----------------|---------------|-----|
| Series name | LxW Dimensions (mm) | | Characteristic type | | Inductance (μ H) | | Height (mm max.) | | Packaging style | Internal code | |
| | 2520 | 2.5x2.0 | W | Large current, low resistance | R47 | 0.47 | M | 1.0 | T | Taping | OS1 |
| | | | H | Low core loss (Emphasized DC resistance) | 1R0 | 1.0 | S | 1.2 | | | |
| | | | V | Low core loss (Emphasized DC bias characteristics) | 100 | 10 | | | | | |
| | | | S | STD product | | | | | | | |

*Note: W characteristic type is available in the full series (not included in sample kit)