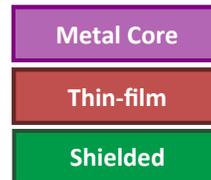
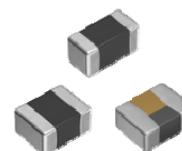


TFM-COMMERCIAL-KIT

Thin-film Inductors for Power Circuit Applications

TDK's TFM series inductors are magnetically shielded, thin-film power inductors with a metallic magnetic core. By using metallic magnetic materials with high saturation magnetic flux densities, the excellent DC bias characteristics needed for power inductors can be achieved. Leakage flux is minimized in TFM inductors by using a closed magnetic circuit structure.



TFM inductors included in this kit are available with dimensions as small as 1.6 x 0.8 x 0.8mm with inductances ranging from 0.47 to 2.2 μ H. The inductors are designed for use in smartphones, tablet terminals, HDDs, SSDs, DVCs, DSCs, mobile display panels, portable game devices, compact power supply modules, and other mobile devices.

Features

- Magnetically shielded, thin-film power inductors with a metallic magnetic core
- Low-profile
- Optimization of internal patterns has improved DC resistance and DC superimposition characteristics
- Operating and storage temperature range of -40 to $+125^{\circ}\text{C}$

Applications

- Smartphones, tablet terminals, HDDs, SSDs, DVCs, DSCs, mobile display panels, portable game devices, compact power supply modules, and other mobile devices

Sample Kit Information

Series	Size [mm]	Thickness [mm] Max.	Inductance [μ H] $\pm 20\%$	Itemp. [A] Max.
TFM160808ALC	1.6 x 0.8	0.8	0.47—1.0	2.6—1.7
TFM201608ALC	2.0 x 1.6	0.8	1.0	2.8
TFM201610ALC	2.0 x 1.6	1.0	0.47	4.9
TFM201610ALM	2.0 x 1.6	1.0	0.47—2.2	4.5—1.9

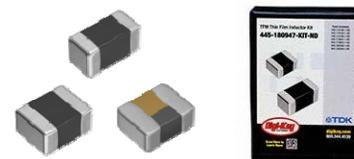
Kit contains 70 pieces total—10 pieces each of 7 values

Digi-Key Part Number: [TFM-COMMERCIAL-KIT](#)



TFM-COMMERCIAL-KIT

Thin-film Inductors for Power Circuit Applications



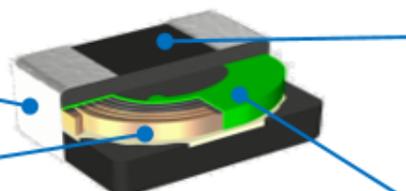
Product Structure

Terminal electrode

- Resin electrode (conductive resin layer + plating)

Coil conductor

- Formed by Cu plating, making miniaturization possible.
- Plating allows the conductor height to be changed, for high flexibility in design.



Metallic magnetic material

- Outstanding DC superimposition characteristics are achieved by high saturation magnetic flux density.

Insulating film

- The coil conductor surface is covered by an insulating film with high withstand voltage.
- Application of thin-film processing methods allows the formation of insulating films with high dimensional precision.

Sample Kit Contains:

Sample Kit Part Number	TDK Part Number	Part Number Description
TFM-COMMERCIAL-KIT	TFM160808ALC-R47MTAA	1.6x0.8x0.8, Inductor, 0.47μH, 20%
	TFM160808ALC-1R0MTAA	1.6x0.8x0.8, Inductor, 1.0μH, 20%
	TFM201608ALC-1R0MTCA	2.0x1.6x0.8, Inductor, 1.0μH, 20%
	TFM201610ALC-R47MTAA	2.0x1.6x1.0, Inductor, 0.47μH, 20%
	TFM201610ALM-R47MTAA	2.0x1.6x1.0, Inductor, 0.47μH, 20%
	TFM201610ALM-1R0MTAA	2.0x1.6x1.0, Inductor, 1.0μH, 20%
	TFM201610ALM-2R2MTAA	2.0x1.6x1.0, Inductor, 2.2μH, 20%