Chip Inductors for Power Applications

Our new Chip-Power Inductor FPS-Series 1212, 1616, 242408 and 242418 designed with a high Flux density Ferrite Core. Small footprints 3x3, 4x4, 6x6mm and flat profile. The Inductance range is from 0,5µH to 220µH. Rated Current up to 6.5A. The Models are magnetically shielded with a newly developed Ferrite-Epoxy resin. This Inductors provide good solderability with lead free tinned Terminals and are RoHS compliant.

Applications

Suitable for circuits where high current saturation is critical. When small size matters, only 1.5mm and higher profile for DC/DC converters, for example in portable devices. Backlight for Tablet Displays

Technical Data

L – Value (rated inductance)	≥ 1 MHz measured with HP 4286A RF LCR meter at frequency fL
	< 1 MHz measured with HP 4285A LCR meter at frequency fL
SRF (min)	Measured with HP 4291B
DCR (max)	Measured at 25°C
Rated DC Current	Irms based on temperature rise, determined at the point where the temperature rise does not exceed 40°C above the ambient temperature of 25°C Isat Current based on inductivity drop of 10% related to the unloaded inductivity
Operating Temperature	From -40°C to +105°C (includes component self-heating)
Moisture Sensitivity Levels (MSL)	MSL Level 1, indicating unlimited floor life at ≤ 30°C / 85% relative humidity
Surface Finishing	Flat top for perfect pick and place assembly
Pad Metallization	Tin as top layer
Wire Termination	Spot welding covered with tin layer

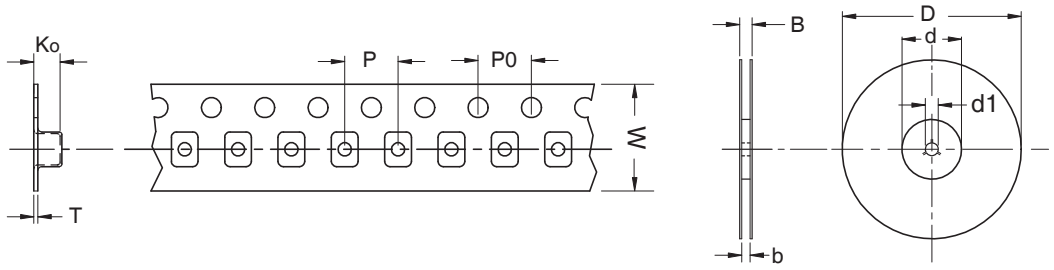
Ordering Code

Example: 1212FPS-1R0X-01

1212 (Case Size) **FPS** (Core Type) **-** **1R0** (Inductance Value) **X** (Tolerance) **-** **YY** (Packing Code) ➔ **1212FPS-1R0M-01**

Case Sizes - 1212, 1616, 242408, 242418
Core Type - FPS (Ferrite)
Tolerances - M (20%), N (30%)
Packing Code - 01 (Reel)

Packing Specification



drawing only schematic, see table

Type	D	d	d1	B	b	W	P	P0	Ko	T
1212	180	50	13	12.5	8.4	8	2	4	1.65	0.25
1616	330	99.5	13.5	17.2	12.6	12	8	4	1.90	0.30
242408	330	100	13.5	17.6	13	12	8	4	2.4	0.30
242418	330	99.5	13.5	21	16.6	16	12	4	4.7	0.40