

Chip Inductors for Power Applications

Our chip-power inductor FPS-Series 1212, 1616, 242408 and 242418 are designed with a high flux density ferrite core. Small footprints 3x3, 4x4, 6x6 mm and flat profile. The inductance range is from 0.47µH to 220µH. Rated current up to 6.5A. The models are magnetically shielded with a newly developed ferrite-epoxy resin. These 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. e.g. in portable devices or backlight for tablet displays

Technical Data		
L – Value (rated inductance)	Measured with E4980AL LCR meter or equivalent at frequency f _L	
SRF (min)	Measured with E4991B Impedance Analyzer or equivalent	
DCR (max)	Measured at 25°C	
Rated DC Current	I _{rms} based on temperature rise, determined at the point where the temperature rise does not exceed 40°C typ above the ambient temperature of 25°C I _{sat} Current based on inductivity drop of 30% related to the unloaded inductivity	
Operating Temperature	-40°C to +125°C (including 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	
Recommended soldering method	Reflow	

Ordering Code Example: 1212FPS-1R0X-01

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

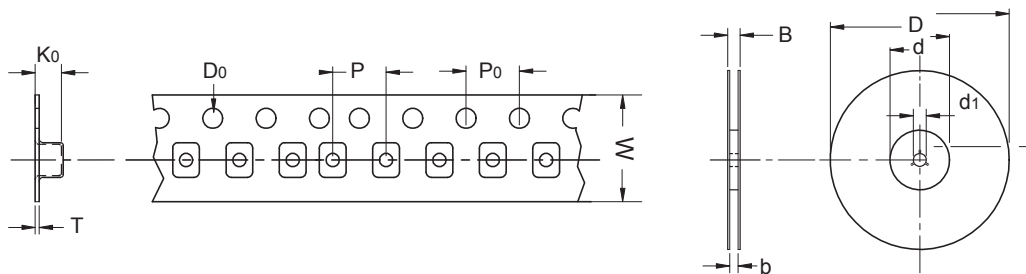
Case Sizes - 1212, 1616, 242408, 242418

Core Type - FPS (Ferrite)

Tolerances - M (20%), N (30%)

Packing Code - 01 (Taped / Reel)

Packing Specification



drawing only schematic, see table

Type	D	Do	d	d1	B	b	W	P	Po	Ko	T
1212	180	1.55	50	13	12.5	8.4	8	4	4	1.60	0.25
1616	330	1.5	99.5	13.5	17.2	12.6	12	8	4	1.90	0.30
242408	330	1.6	100	13.5	17.6	13	12	8	4	2.4	0.30
242418	330	1.5	99.5	13.5	21	16.6	16	12	4	4.7	0.40