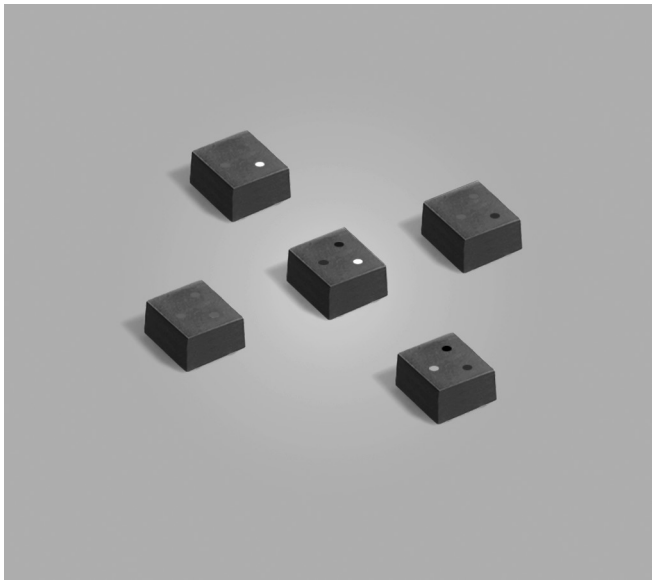
Shielded Power Inductors – FPL3015



- Low profile shielded power inductors, 3 × 3 × 1.5 mm
- Very low DCR, high SRF ratings, Isat ratings up to 2.4 A

Designer's Kit C405 contains 5 each of all values
Core material Ferrite
Core and winding loss
Environmental RoHS compliant, halogen free
Terminations RoHS compliant tin-silver-copper (96.5/3/0.5) over tin over nickel over silver-platinum. Other terminations available at additional cost.
Weight 45 – 51 mg
Ambient temperature –40°C to +85°C with (40°C rise) Irms current.
Maximum part temperature +125°C (ambient + temp rise).
Storage temperature Component: –40°C to +125°C.
Tape and reel packaging: –40°C to +80°C
Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles **Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at <30°C / 85% relative humidity)
Failures in Time (FIT) / Mean Time Between Failures (MTBF) 38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332
Packaging 2000/7″reel; 7500/13″ reel Plastic tape: 8 mm wide, 0.2 mm thick, 4 mm pocket spacing, 1.78 mm pocket depth
PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash.

Part number	Inductance ±20% (µH)	DCR (Ohms) nom	DCR (Ohms) max	SRF typ (MHz)	Isat (A) 10% drop	Isat (A) 20% drop	Isat (A) 30% drop	Irms (A) 20°C rise	Irms (A) 40°C rise
FPL3015-901ML_	0.90	0.048	0.055	130	1.20	1.90	2.40	1.85	2.45
FPL3015-122ML_	1.2	0.054	0.062	105	1.00	1.60	2.05	1.80	2.40
FPL3015-152ML_	1.5	0.062	0.072	100	0.90	1.40	1.90	1.55	2.05
FPL3015-222ML_	2.2	0.082	0.094	75	0.75	1.20	1.60	1.50	2.00
FPL3015-332ML_	3.3	0.108	0.124	55	0.65	1.10	1.40	1.20	1.70
FPL3015-472ML_	4.7	0.145	0.167	50	0.55	0.90	1.20	1.00	1.40
FPL3015-682ML_	6.8	0.194	0.223	38	0.45	0.75	1.00	0.90	1.20
FPL3015-103ML_	10	0.301	0.346	32	0.35	0.59	0.81	0.76	1.00
FPL3015-153ML_	15	0.435	0.500	26	0.24	0.43	0.62	0.61	0.82
FPL3015-223ML_	22	0.576	0.662	20	0.21	0.36	0.51	0.56	0.74
FPL3015-333ML_	33	0.860	0.989	15.5	0.19	0.32	0.45	0.44	0.59

1. When ordering, please specify **packaging** code:

FPL3015-333MLC

Packaging: **C** = 7″ machine-ready reel. EIA-481 embossed plastic tape (2000 parts per full reel).
B = Less than full reel. In tape, but not machine ready.
To have a leader and trailer added ($25 charge), use code letter C instead.
D = 13″ machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (7500 parts per full reel).

2. Inductance tested at 1 MHz, 0.1 Vrms, 0 Adc.
3. DCR measured on a micro-ohmmeter.
4. SRF measured using Agilent/HP 4395A network analyzer or equivalent.
5. DC current at 25°C that causes the specified inductance drop from its value without current.
6. Current that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.
7. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

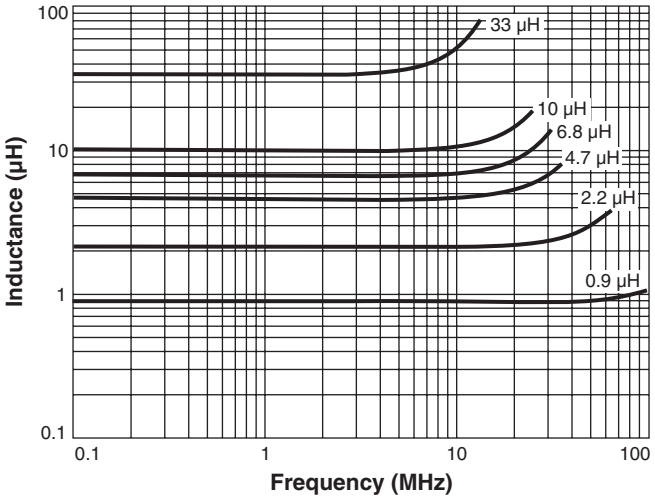
PulseGM
www.pulsegm.com

China +86-0755-21055287
Sales@pulsegm.com

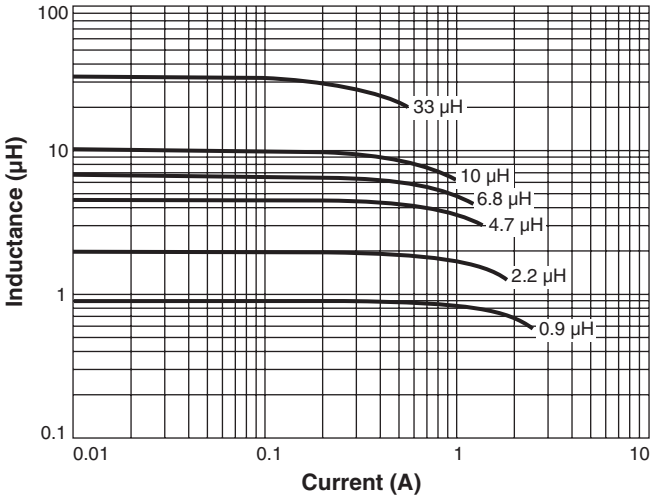
©PulseGM Inc. 2019
This product may not be used in medical or high risk applications without prior PulseGM approval.
Specification subject to change without notice.
Please check web site for latestinformation.

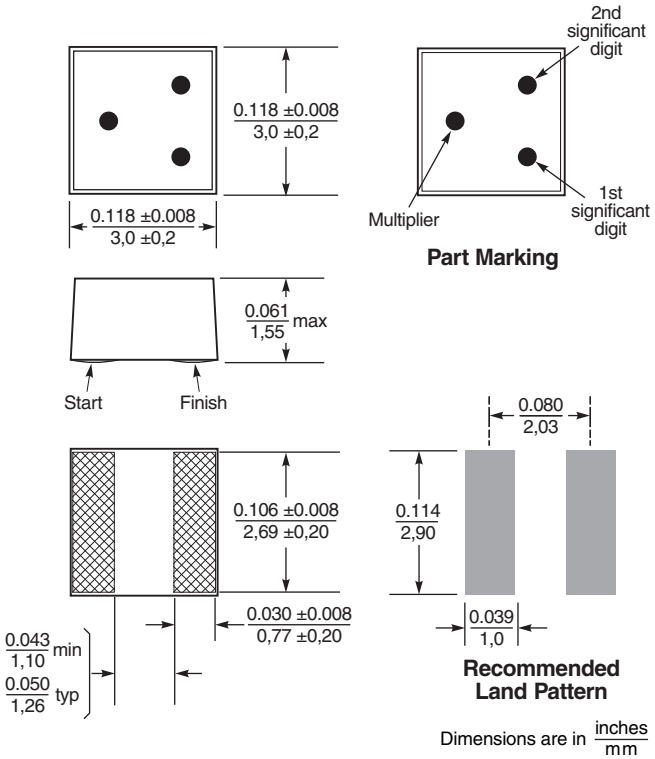
Shielded Power Inductors – FPL3015 Series

Typical L vs Frequency



Typical L vs Current





Part Marking (Parts manufactured prior to Sept. 15, 2009 may not be marked.)

Part number	Value	1st digit	2nd digit	Multiplier
FPL3015-901	0.90 µH	White	Black	Brown
FPL3015-122	1.2 µH	Brown	Red	Red
FPL3015-152	1.5 µH	Brown	Green	Red
FPL3015-222	2.2 µH	Red	Red	Red
FPL3015-332	3.3 µH	Orange	Orange	Red
FPL3015-472	4.7 µH	Yellow	Violet	Red
FPL3015-682	6.8 µH	Blue	Gray	Red
FPL3015-103	10 µH	Brown	Black	Orange
FPL3015-153	15 µH	Brown	Green	Orange
FPL3015-223	22 µH	Red	Red	Orange
FPL3015-333	33 µH	Orange	Orange	Orange

Note: All marked parts have three dots. Black dot, used only on -901 and -103 as second significant digit, may be very difficult to see.

Small surface blemishes are not unusual and do not adversely affect performance. Wire may be visible inside the voids.

Acceptable void sizes:
Top: 0.01 in / 0,254 mm × 0.01 in / 0,254 mm
Sides: 0.02 in / 0,5 mm × 0.047 in / 1,2 mm

PulseGM
www.pulsegm.com

China +86-0755-21055287
Sales@pulsegm.com

©PulseGM Inc. 2019
This product may not be used in medical or high risk applications without prior PulseGM approval.
Specification subject to change without notice.
Please check web site for latest information.