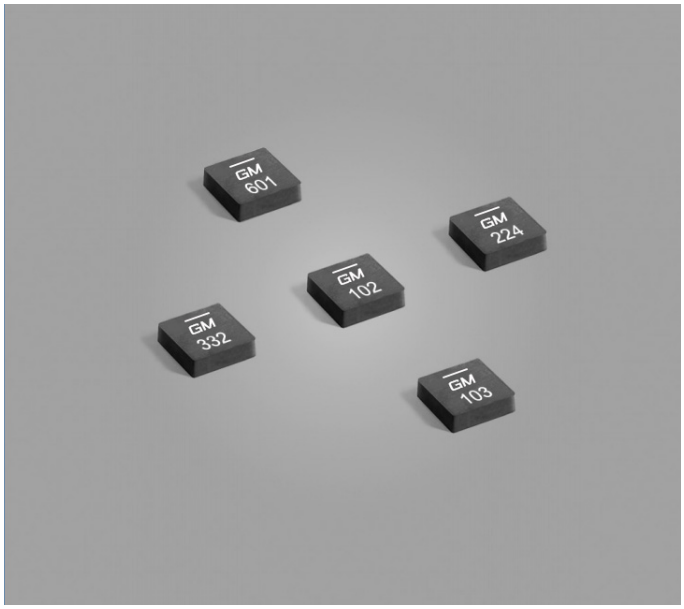
Shielded Power Inductors – PFL3010



- AEC-Q200 Grade 1 qualified (–40°C to +125°C ambient)
- High current, magnetically shielded power inductors
- Only 1 mm high with a 3 mm × 3 mm footprint

Designer's Kit C440 contains 5 of each XFL3010 and XFL3012 value
Core material Composite
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 44 mg
Ambient temperature –40°C to +125°C with (40°C rise) Irms current.
Maximum part temperature +165°C (ambient + temp rise).
Storage temperature Component: –55°C to +165°C.
Tape and reel packaging: –55°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, 0.23 mm thick, 4 mm pocket spacing, 1.14 mm pocket depth
PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash.

Part number[1]	Inductance[2] ±20% (µH)	DCR (Ohms)[3] nom	DCR (Ohms)[3] max	SRF typ[4] (MHz)	Isat (A)[5] 10% drop	Isat (A)[5] 20% drop	Isat (A)[5] 30% drop	Irms (A)[5] 20°C rise	Irms (A)[5] 40°C rise
PFL3010-601ME_	0.60	0.030	0.033	180	1.8	2.4	2.7	1.8	2.5
PFL3010-102ME_	1.0	0.043	0.049	128	1.5	2.1	2.4	1.6	2.3
PFL3010-152ME_	1.5	0.071	0.080	97.0	1.2	1.6	1.9	1.4	1.9
PFL3010-222ME_	2.2	0.111	0.122	78.0	0.94	1.2	1.5	1.0	1.3
PFL3010-332ME_	3.3	0.154	0.166	64.0	0.86	1.1	1.3	0.88	1.2
PFL3010-472ME_	4.7	0.217	0.230	57.0	0.71	0.97	1.1	0.84	1.1
PFL3010-682ME_	6.8	0.315	0.346	42.0	0.56	0.78	0.92	0.72	0.95
PFL3010-103ME_	10	0.472	0.519	35.0	0.44	0.61	0.71	0.62	0.82
PFL3010-153ME_	15	0.521	0.560	28.4	0.33	0.45	0.53	0.56	0.76
PFL3010-223ME_	22	0.770	0.818	21.7	0.26	0.35	0.40	0.48	0.66
PFL3010-333ME_	33	1.12	1.20	17.5	0.22	0.30	0.35	0.41	0.56
PFL3010-393ME_	39	1.23	1.40	16.9	0.21	0.29	0.33	0.37	0.51
PFL3010-473ME_	47	1.71	1.93	14.4	0.16	0.23	0.27	0.33	0.44
PFL3010-563ME_	56	1.95	2.16	13.6	0.16	0.22	0.25	0.3	0.41
PFL3010-683ME_	68	2.32	2.60	12.7	0.15	0.21	0.24	0.27	0.36
PFL3010-823ME_	82	2.77	3.10	11.6	0.14	0.20	0.23	0.26	0.34
PFL3010-104ME_	100	4.64	5.50	10.1	0.13	0.19	0.22	0.20	0.29
PFL3010-224ME_	220	9.91	12.0	6.9	0.08	0.12	0.14	0.14	0.19

1. When ordering, please specify **termination** and **packaging** codes:

PFL3010-222MEC

Termination: **E** = RoHS compliant tin-silver-copper (96.5/3/0.5) over tin over nickel over silver-platinum.
Special order:
S = non-RoHS tin-lead (63/37).

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 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.

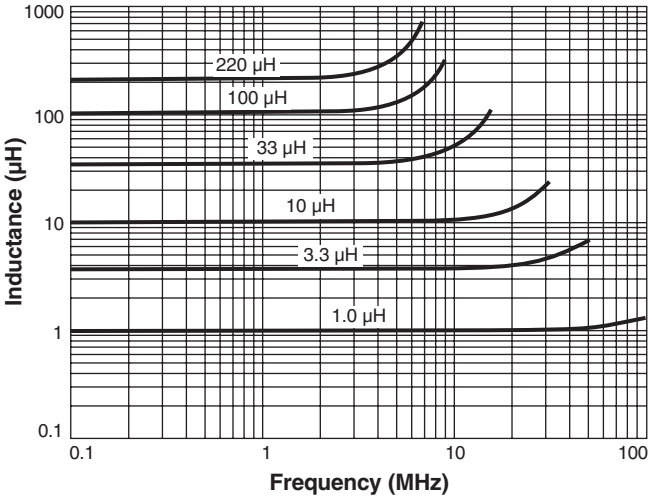
PulseGM
www.pulsegm.com

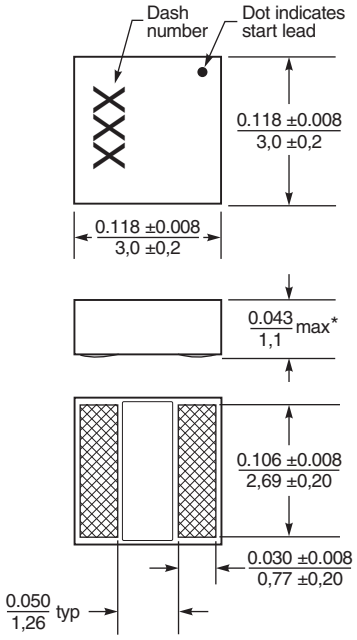
China +86-0755-21055287
mikaluo@pulsegm.com

©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.

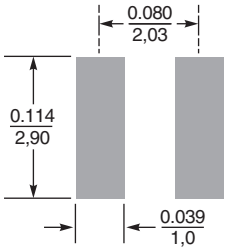
Shielded Power Inductors – PFL3010

Typical L vs Frequency





Parts manufactured prior to June 2018 may be marked differently.



Recommended Land Pattern

Dimensions are in inches / mm

*For optional tin-lead and tin-silver-copper terminations, dimensions are for the mounted part. Dimensions before mounting can be an additional 0.005 inch / 0.13 mm.

PulseGM
www.pulsegm.com

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

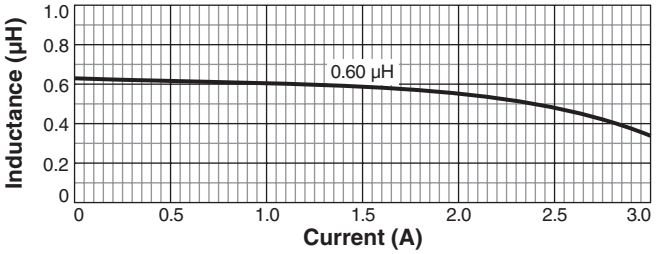
©PulseGM Inc. 2019
This product may not be used in medical or high risk applications without prior PulseGM approval.
Specification subject to change without notice.
Please check web site for latestinformation.

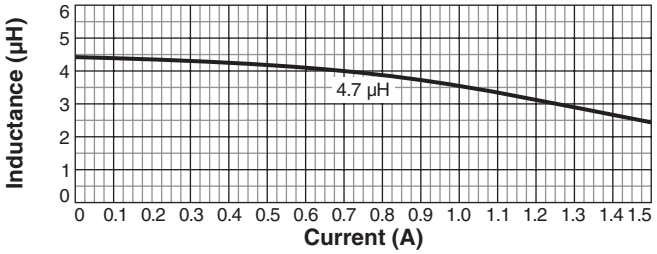
RoHS/ REACH COMPLIANT

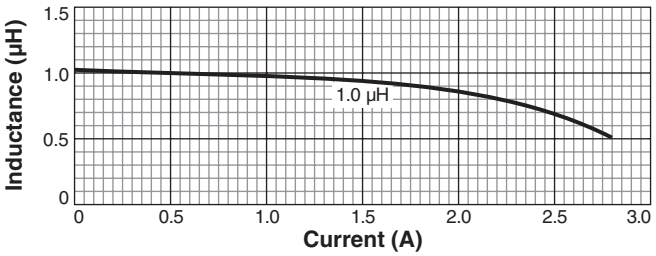
Halogen Free

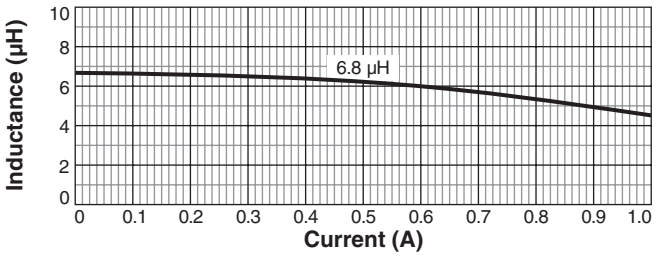
AEC Q200 +125°C

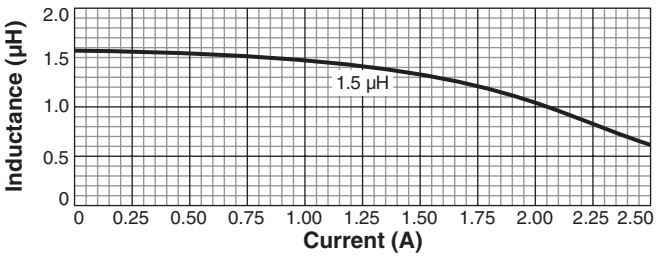
Typical L vs Current

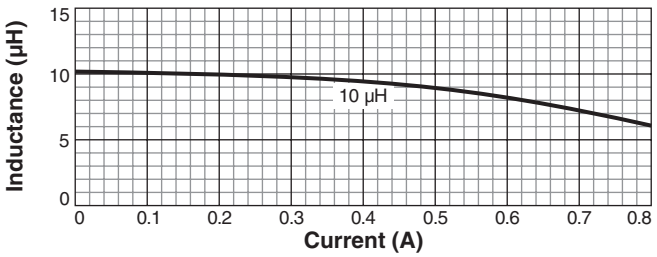


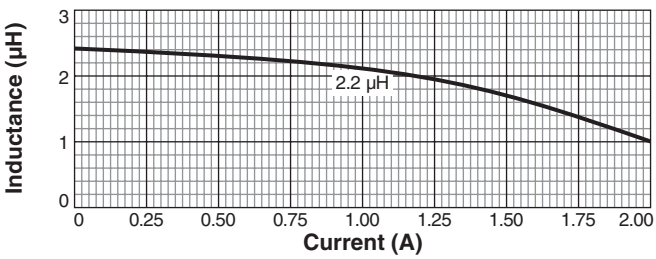


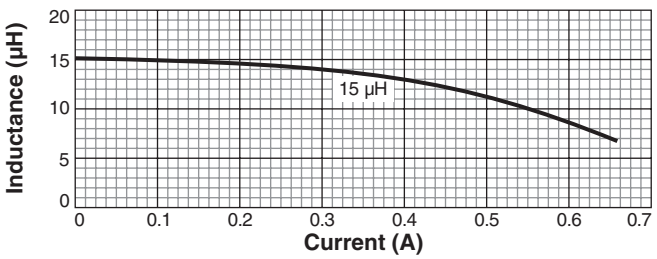


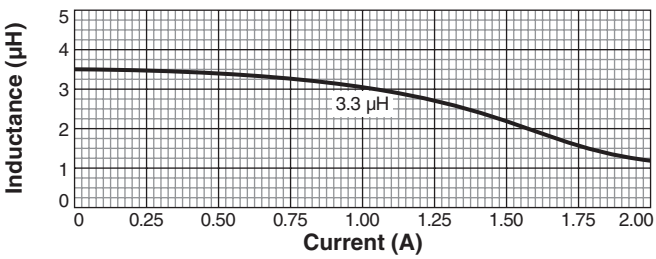


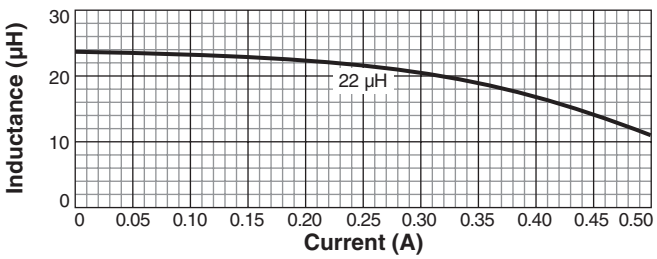












China +86-0755-21055287
mikaluo@pulsegm.com

©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.

RoHS/ REACH COMPLIANT

Halogen Free

AEC Q200 +125°C

Typical L vs Current

