



PRODUCT SPECIFICATION

DOCUMENT NO. ENS000139520

DESCRIPTION	DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY
AIP0630GX Series	Logan	Phil	Phil	Phil

Molding Type Power Choke

Scope

Features

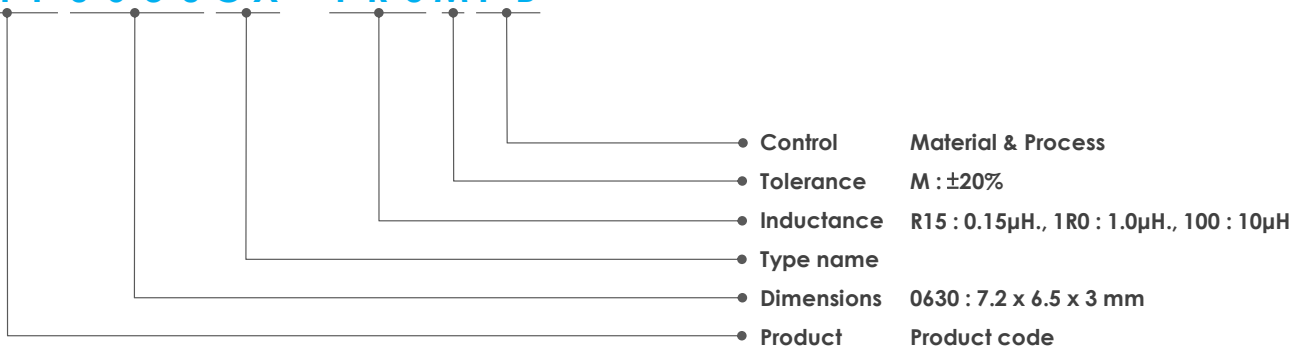
- Thickness max. 3mm.
- Flux shielded structure, low radiation.
- High saturation current realized by coil design and alloy powder.
- Low power loss and temperature rising realized by low DC Resistance.
- Low AC loss realized by powder, binder and structure design.
- 100% Pb free meet RoHS standard.

Applications

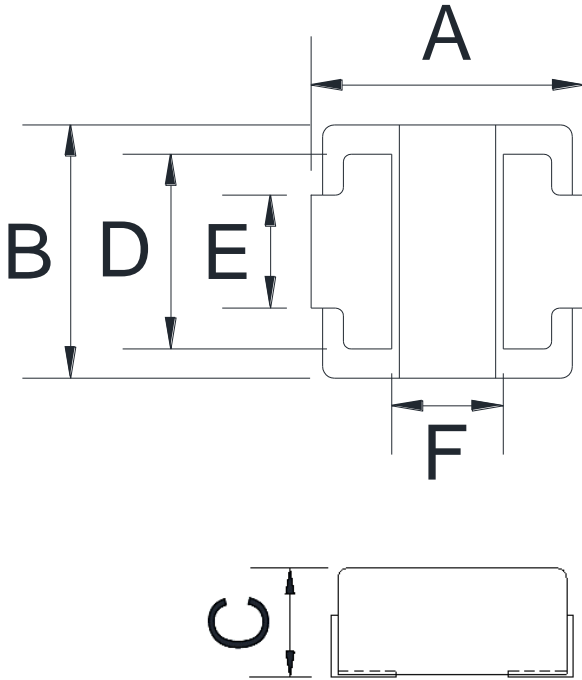
- 5G
- ADAS / Infotainment
- Server / Industry / VGA
- Desktop / NB / MB
- DC to DC converter in low profile high current system such as CPU, VRM, V-core, VGA card...etc.

Explanation of Part Number

A I P 0 6 3 0 G X - 1 R 0 M P B

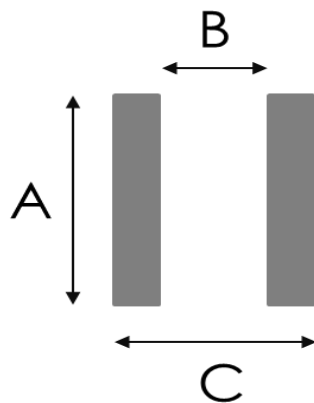


Dimensions



Code	Dimensions[mm]
A	7.2 ±0.4
B	6.5 ±0.4
C	3.0 max
D	5.0 ±0.3
E	3.0 ±0.3
F	3.6 max

Recommended land pattern

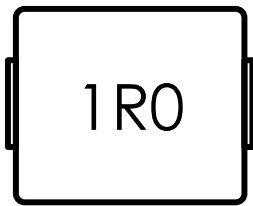


Code	Dimensions[mm]
A	5.5
B	2.6
C	5.5

Marking

The inductor is marked with a 3-digit code (using ink for marking).

Example: R24 means 0.24 μ H
1R0 means 1.0 μ H
100 means 10 μ H



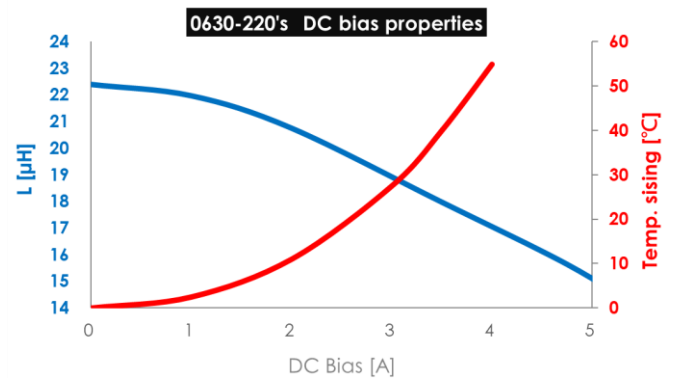
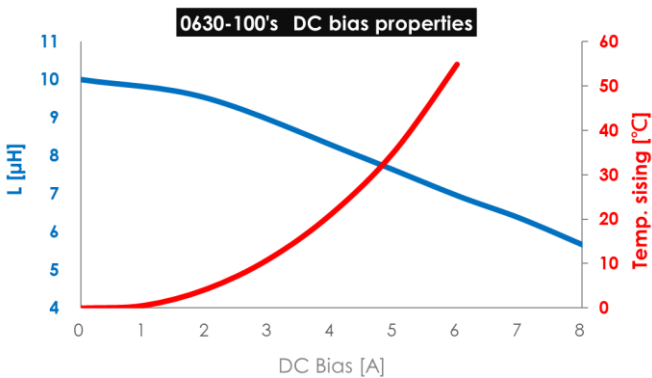
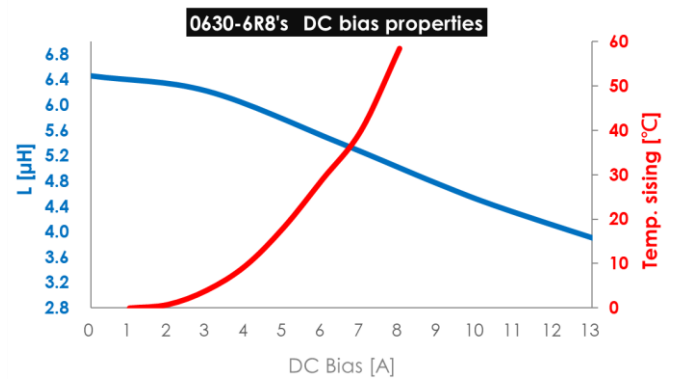
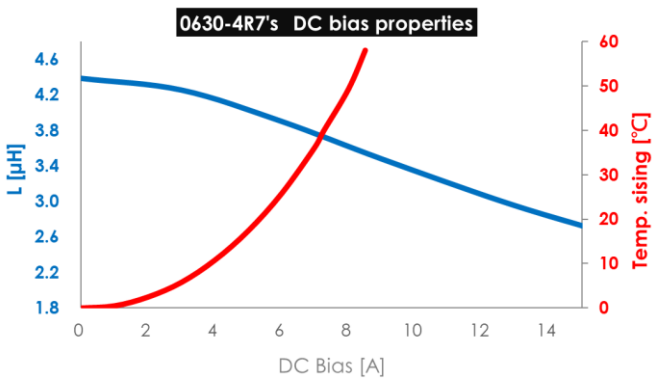
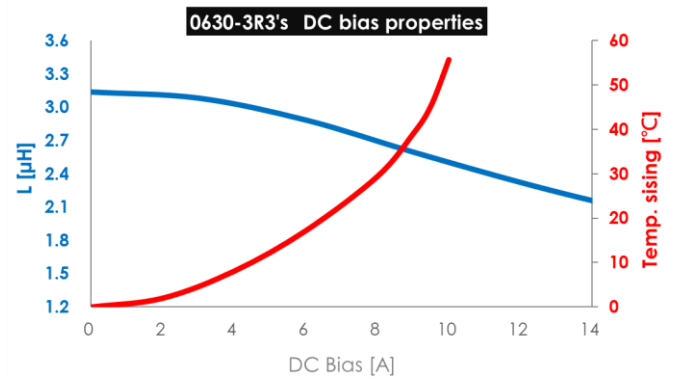
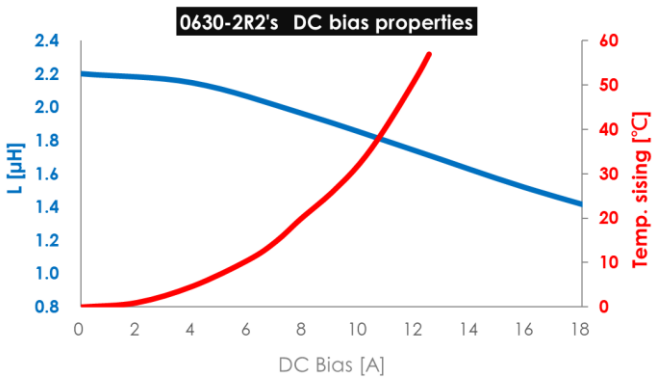
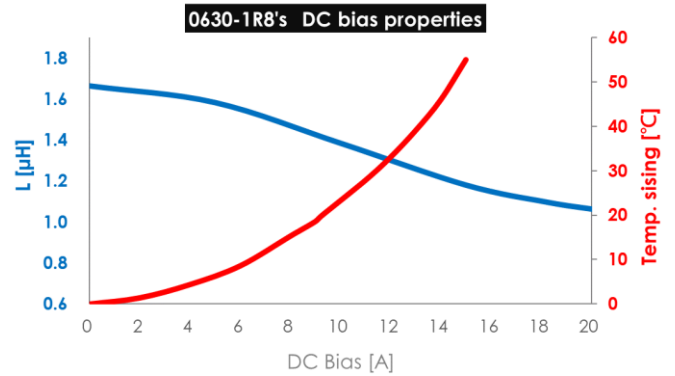
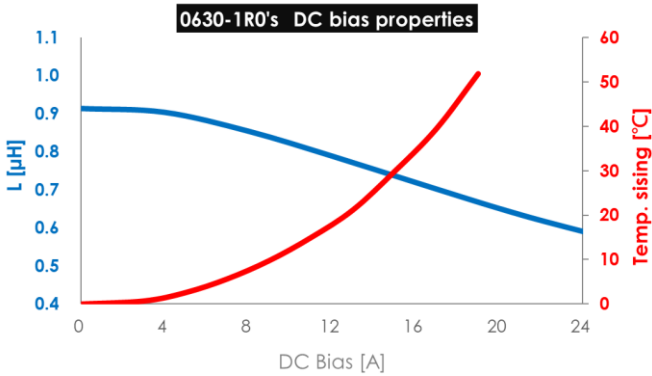
Specifications

0630 Series PN	Li [μ H]	Rdc [$m\Omega$]		Isat [A]		Irms [A]		SRF [MHz]
	Initial Value	DC resistance		Li drop 30%		Temp. rising 40°C		Resonance
	+/-20%	typ.	max.	typ.	max.	typ.	max.	typ.
AIP0630GX-1R0MPB	1.0	5.3	5.95	23	20.7	18	17.1	48
AIP0630GX-1R8MPB	1.8	8.5	9.5	18.2	16.4	13	12.4	34
AIP0630GX-2R2MPB	2.2	11.7	13.1	15.9	14.3	10.4	9.9	32
AIP0630GX-3R3MPB	3.3	17.5	19.2	12.2	11.0	8.4	8.0	25
AIP0630GX-4R7MPB	4.7	26.3	29.3	12.6	11.3	7.1	6.7	21
AIP0630GX-6R8MPB	6.8	39.5	44.5	10.8	9.7	5.5	5.2	16.5
AIP0630GX-100MPB	10	53	62	6.5	6.0	4.9	4.7	13.7
AIP0630GX-220MPB	22	115	134	5.0	4.5	3.5	3.3	9.1

Notes

1. Test environment of all data is referenced to 27 °C ambient.
2. Test conditions: 1MHz, 1Vrms.
3. Isat : DC current (A) that will cause L to drop approximately 30 %.
4. Irms : DC current (A) that will cause an approximate ΔT of 40 °C(reference ambient temperature is 25°C).
5. Operating temperature range – 40 °C to + 125 °C.
6. The part temperature (ambient + temp rise) should not exceed 125 °C under worst case operating conditions. PCB land pattern, trace size - thick, circuit design and proximity to other components are all the factors will affect the temperature performance of the device. Therefore should be approved in application conditions and end product.
7. Rdc Measured with DC resistance meters RM3543(HIOKI) or equivalent.

Bias Properties



Frequency Response

