



INPAQ

PRODUCT SPECIFICATION

DOCUMENT NO. ENS000134430

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

Molding Type Power Choke

Scope

Features

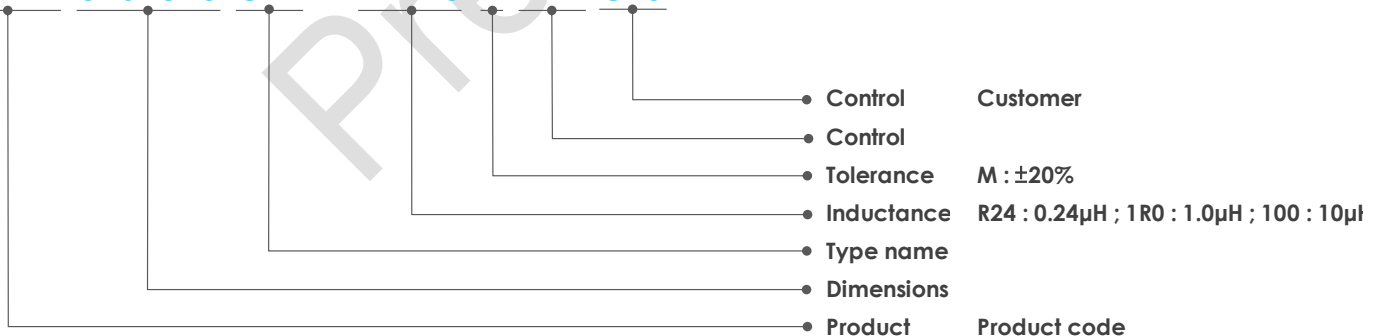
- Thickness max. 3mm.
- Flux shielded structure.
- High saturation current realized by coil design and alloy powder.
- Low power loss and temperature rising realized by low DC Resistance.
- 100% Pb free meet RoHS standard.

Applications

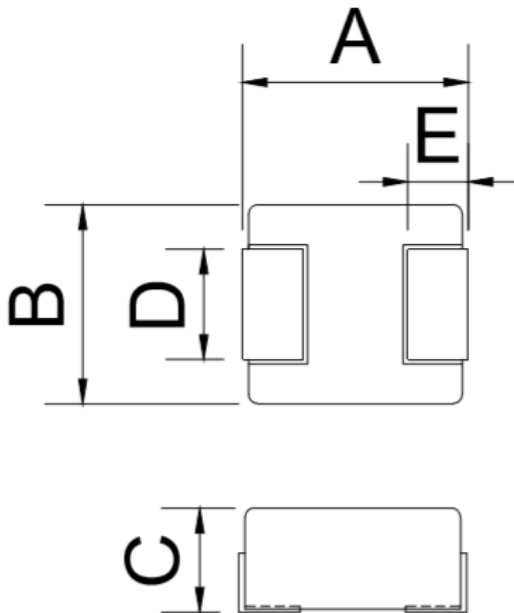
- Desktop / Notebook / Server
- DC to DC converter in low profile high current system such as CPU, VRM, V-core, VGA card...etc.

Explanation of Part Number

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

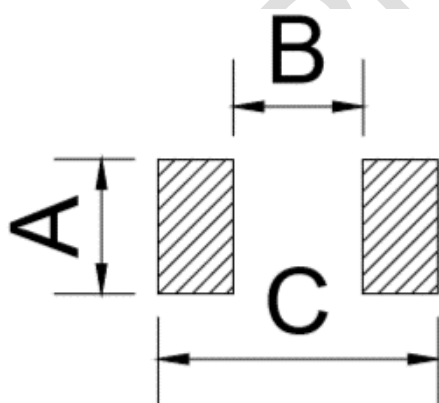


Dimensions



Code	Dimensions[mm]
A	6.7 ± 0.3
B	6.5 ± 0.3
C	3 max.
D	2.9 ± 0.5
E	1.6 ± 0.3

Recommended land pattern



Code	Dimensions[mm]
A	3.5
B	3.7
C	8.4

Specifications

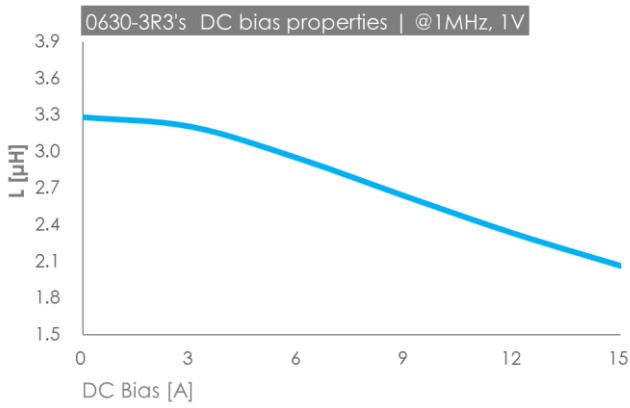
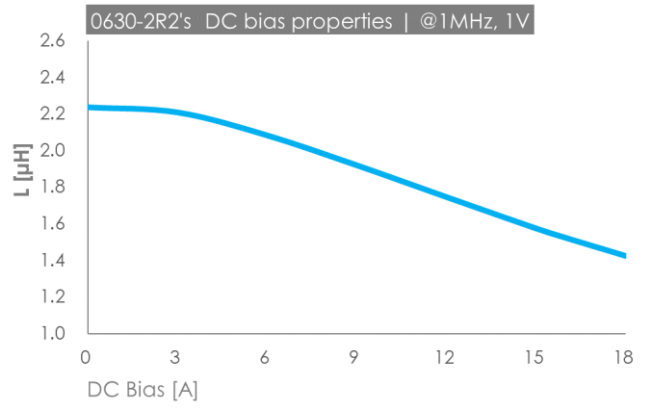
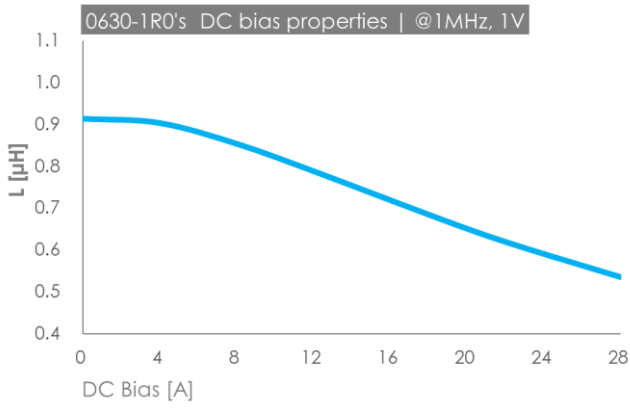
PN	Li [μ H]	Rdc [$m\Omega$]		Isat [A]	Irms [A]	SRF [MHz]	Core loss [mW]		
	<i>test @1mA</i>	DC resistance		<i>Li drop 30%</i>	<i>Temp. rising 40 °C</i>	<i>Resonance</i>	<i>steinmetz equation</i>		
	$\pm 20\%$	typ.	max.	typ.	typ.	typ.	k	x	y
AIP0630GX-1R0MPAG0	1.0	5.5	6.1	23	18	48	6.32980E-05	1.05308	2.22646
AIP0630GX-2R2MPAG0	2.2	12.7	14.0	16.0	10	32	1.77952E-04	1.04535	2.23232
AIP0630GX-3R3MPAG0	3.3	17.0	19.5	12.5	8.5	25	2.72076E-04	1.04835	2.25764

Notes

1. Test environment of all data is referenced to 25 °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 + 150 °C.
6. The part temperature (ambient + temp rise) should not exceed 150 °C under worst case operating conditions.

Preliminary

Current graphs



Preliminary