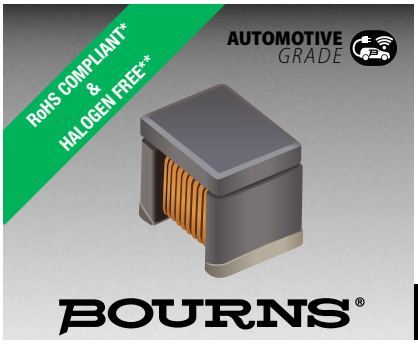


Features

- High rated current
- Inductance up to 47 µH
- Compact size
- High impedance over a wide frequency range
- High operating temperature up to 150 °C
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

Applications

- Automotive systems
- Noise filters
- DC power lines
- Power over Coaxial

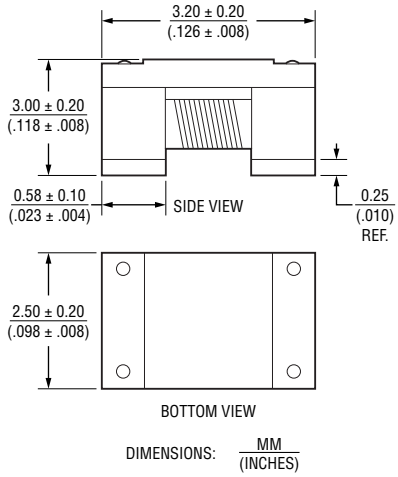
CWP3230A Series – Chip Inductors

Electrical Specifications

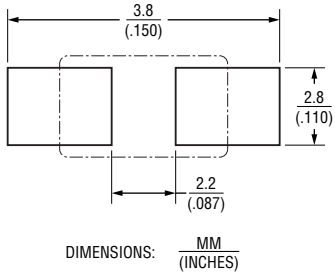
Bourns® Part No.	Inductance @ 100 kHz / 0.1 V		DCR (Ω)		SRF (MHz)	Isat (mA) Typ.					Irms (mA) Typ.		
	L (µH)	Tol. %	Typ.	Max.	Typ.	25 °C	85 °C	105 °C	125 °C	140 °C	25 °C	85 °C	125 °C
CWP3230A-2R2M	2.2	±20	0.10	0.13	300	2200	1900	1700	1500	1300	1900	1730	1000
CWP3230A-6R8M	6.8		0.20	0.24	120	1400	1000	930	800	700	1360	1230	800
CWP3230A-100M	10		0.29	0.34	95	1100	850	760	660	560	1130	1020	570
CWP3230A-220M	22		0.76	0.88	70	720	580	520	450	390	700	630	400
CWP3230A-470M	47		1.00	1.20	50	300	280	200	180	150	500	300	100

Notes:
Maximum part temperature +140 °C (ambient temperature plus self-generation of heat).
Isat: DC current that causes 30 % inductance drop from its initial value at 200 mA at specified temperature.
Irms: Current that causes a 40 °C rise at 25 °C.
Current that causes a 40 °C rise at 85 °C.
Current that causes a 15 °C rise at 125 °C.

Product Dimensions



Recommended Layout



How to Order

CWP3230A - 2R2 M

Model

Inductance Value Code
- 2R2 = 2.2 µH
- 6R8 = 6.8 µH
- 100 = 10 µH
- 220 = 22 µH
- 470 = 47 µH

Tolerance Code
- M = ±20 %

Additional Information

Click these links for more information:

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

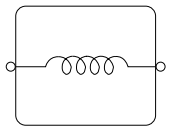
General Specifications

Operating Temperature ..... -55 °C to +150 °C
(Temperature rise included)
Storage Temperature ..... -55 °C to +150 °C
Temperature Rise ..... 15 °C or 40 °C typ. at rated Irms
Rated Current ..... Inductance drops 30 % at Isat
Moisture Sensitivity Level 1
ESD Classification (HBM) ..... N/A

Materials

Core Material ..... Ferrite
Wire ..... Enameled copper
Terminal ..... Ag/Ni/Sn
Packaging ..... 500 pcs. per 7 ″ reel

Electrical Schematic

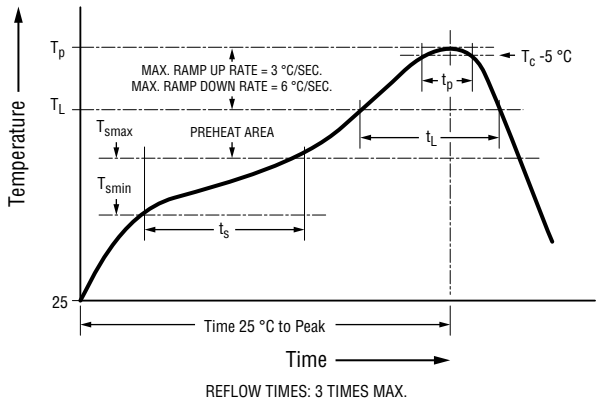


WARNING
Cancer and Reproductive Harm
www.P65Warnings.ca.gov

* RoHS Directive 2015/863, Mar 31, 2015 and Annex.
** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.
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Soldering Profile

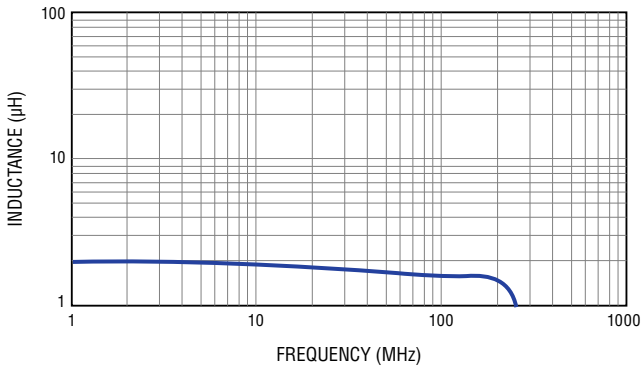


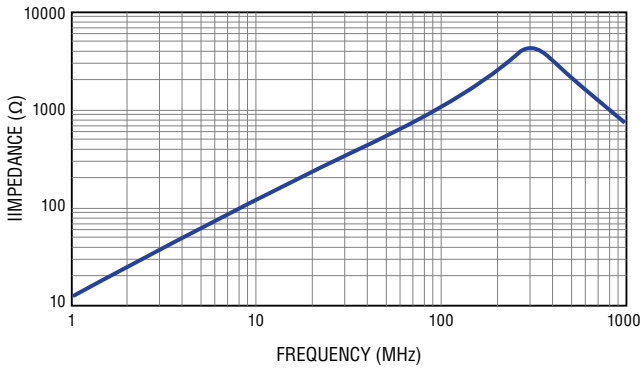
REFLOW TIMES: 3 TIMES MAX.

Profile Feature	Pb Free Assembly
Preheat - Temperature Min. (T_{smin}) - Temperature Max. (T_{smax}) - Time(t_s) from T_{smin} to T_{smax}	 150 °C 200 °C 60-120 seconds
Ramp-up Rate (T_L to T_p)	3 °C/second max.
Liquidous temperature (T_L) Time (t_L) maintained above T_L	217 °C 60-150 seconds
Reflow temperature	250 °C
Time (t_p) at T_c - 5 °C (T_p should be equal to or less than T_c)	< 30 seconds
Ramp-Down Rate (T_p to T_L)	6 °C/second max.
Time 25 °C to Peak Temperature	8 minutes max.

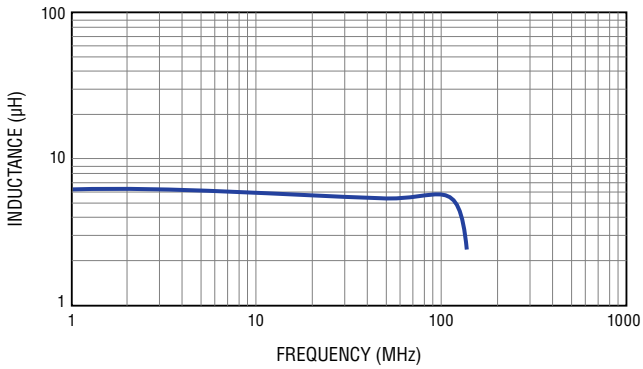
Inductance vs. IDC

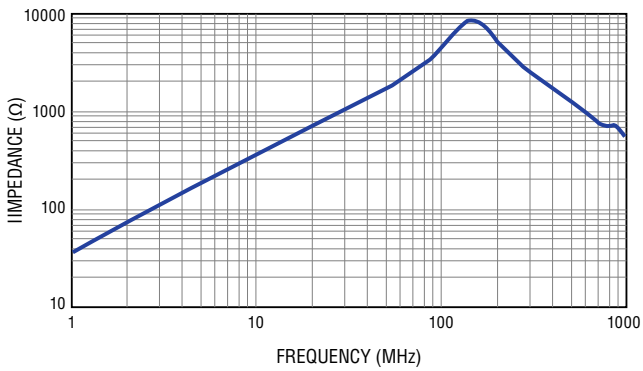
CWP3230A-2R2M





CWP3230A-6R8M



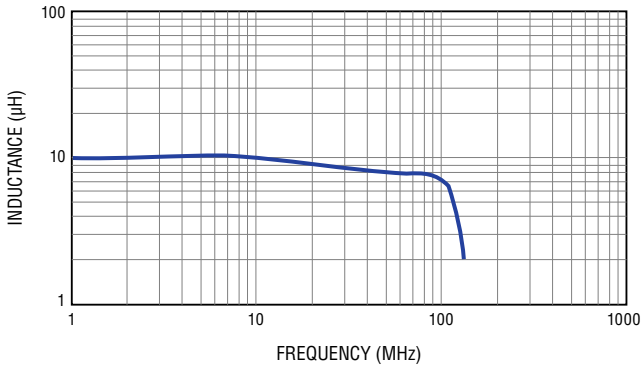


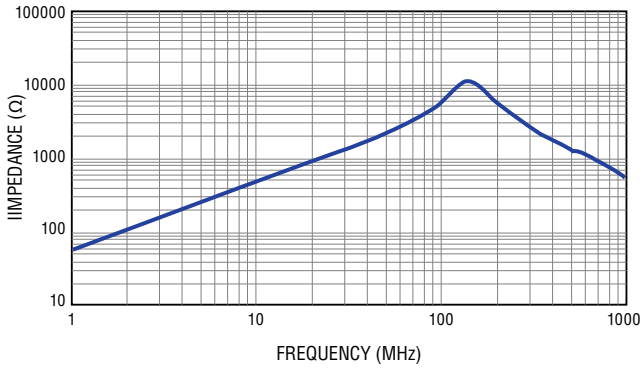
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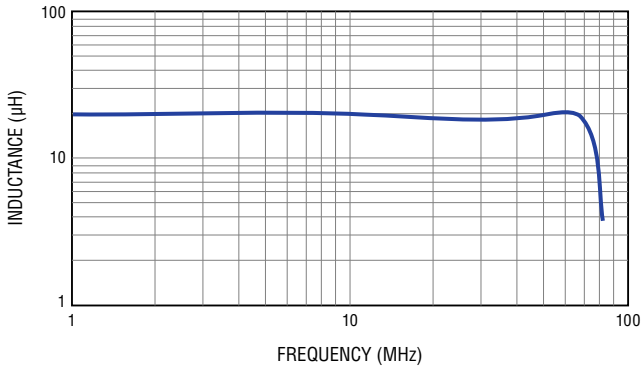
Inductance vs. IDC (continued)

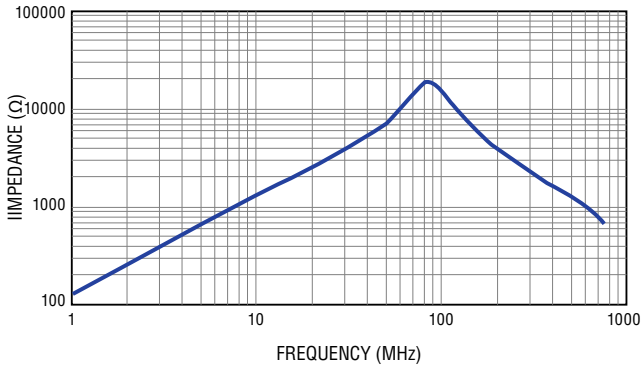
CWP3230A-100M



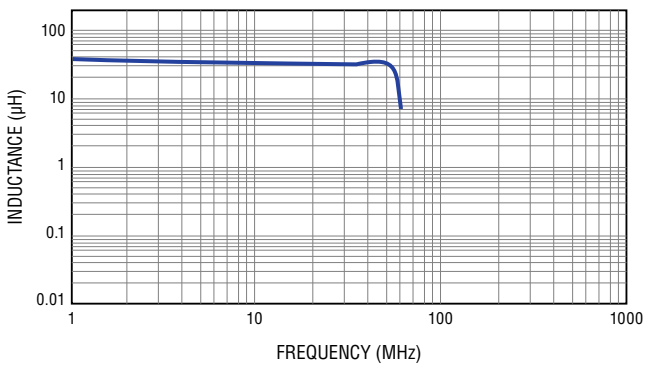


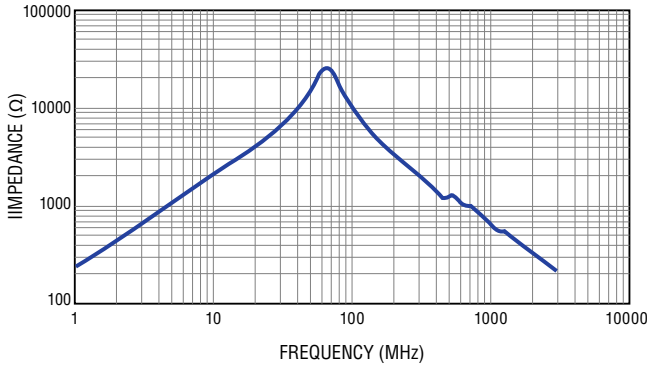
CWP3230A-220M





CWP3230A-470M

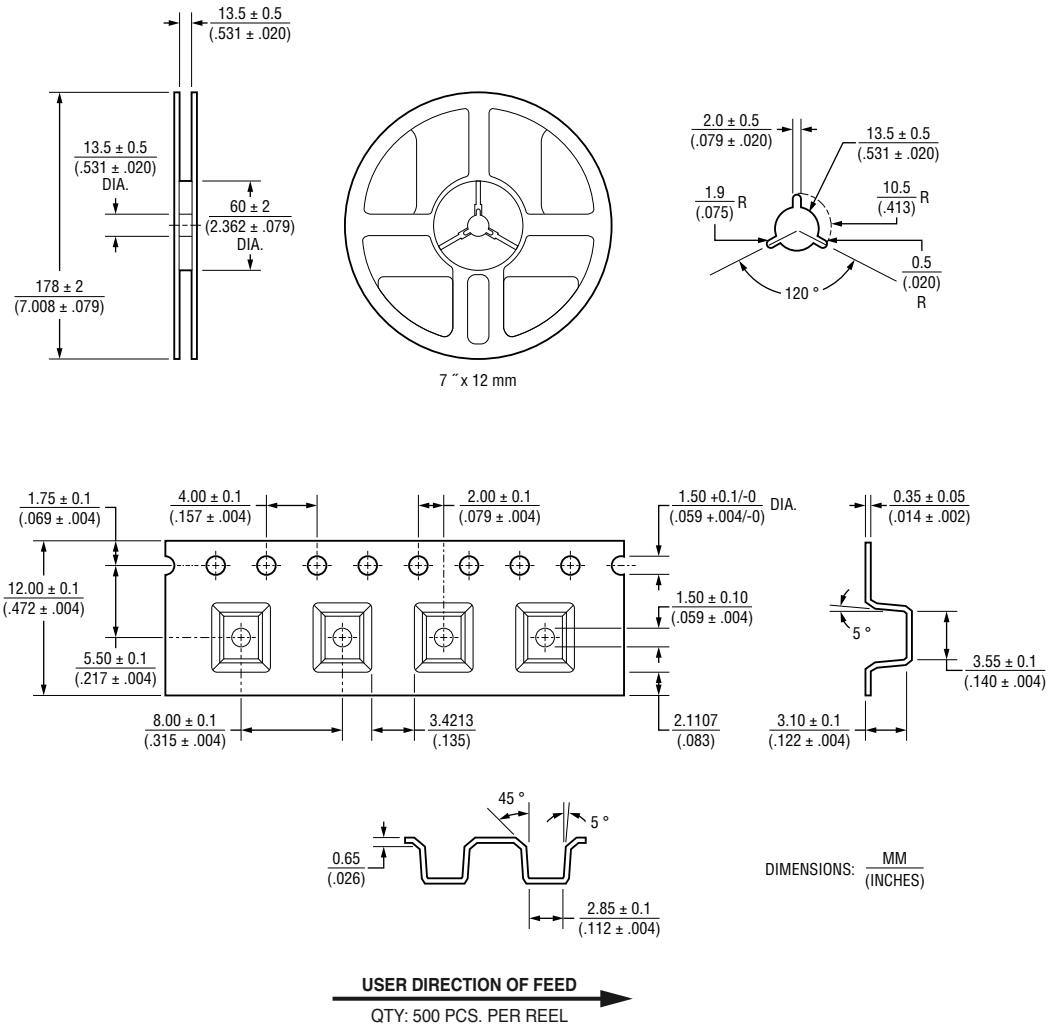




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Packaging Specifications



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