

#### **Features**

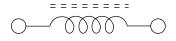
- Shielded construction for low radiation
- Metal alloy powder core for high saturation current
- Wide side terminal for enhanced mechanical strength
- High vibration resistance (15 G typical, 30 G peak)
- High operating temperature
- Low buzz noise
- AEC-Q200 compliant
- RoHS compliant\* and halogen free\*\*

# SRP1265WA Series - Shielded Power Inductors

#### Electrical Specifications @ 25 °C

	Inductance @ 100 kHz / 1 V		Q Typ.	SRF (MHz)	DCR (mΩ)	DCR (mΩ)	Irms (A)	Isat (A)
Bourns Part No.	<b>L (μH)</b>	Tol. %	100 kHz	Typ.	Typ.	Max.	Typ.	Typ.
SRP1265WA-R68M	0.68	20	20	48	1.35	1.62	36.5	36.5
SRP1265WA-1R0M	1.0	20	20	39	1.75	2.1	32	32
SRP1265WA-1R5M	1.5	20	20	30	2.3	2.76	27	29
SRP1265WA-2R2M	2.2	20	20	25	3.6	4.2	23	26
SRP1265WA-3R3M	3.3	20	20	19	5.9	6.8	19	24
SRP1265WA-4R7M	4.7	20	20	16	7.3	8.4	17	20
SRP1265WA-5R6M	5.6	20	20	14	9.1	10	15	18
SRP1265WA-6R8M	6.8	20	20	13	9.7	11.2	14	17
SRP1265WA-8R2M	8.2	20	20	11	11.8	13.6	13	16
SRP1265WA-100M	10	20	20	10	14.3	16.5	12	13.5
SRP1265WA-150M	15	20	20	8	23.6	27.2	9.0	10
SRP1265WA-220M	22	20	20	7	34.1	39.2	7.5	8.0
SRP1265WA-330M	33	20	20	6	53	61	6.3	7.2
SRP1265WA-470M	47	20	20	5	74.1	89	5.2	6.0

#### **Electrical Schematic**



#### **How to Order**

SRP1265WA - 1R0M Model Value Code (see table)

#### **Additional Information**

Click these links for more information:











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### **General Specifications**

Operating Temperature

.....-55 °C to +165 °C (Temperature rise included)

Storage Temperature (Component)

.....-55 °C to +165 °C Temperature Rise ... 40 °C at rated Irms1 Rated Current

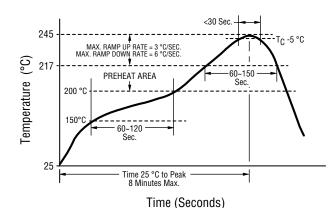
...... Inductance drops 30 % at Isat Moisture Sensitivity Level.....1 ESD Classification (HBM).....N/A

<sup>1</sup> Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

#### **Materials**

Core.....Metal alloy powder Wire .....Enameled copper Terminal Finish ...... Sn Packaging...... 500 pcs. per 13-inch reel

#### **Soldering Profile**



Profile Feature	Pb Free Assembly			
Preheat - Temperature Min. (T <sub>Smin</sub> ) - Temperature Max. (T <sub>Smax</sub> ) - Time(t <sub>S</sub> ) from T <sub>Smin</sub> to T <sub>Smax</sub>	150 °C 200 °C 60-120 seconds			
Ramp-up Rate (T <sub>L</sub> to T <sub>p</sub> )	3 °C/second max.			
Liquidous temperature (T <sub>L</sub> ) Time (t <sub>L</sub> ) maintained above T <sub>L</sub>	217 °C 60-150 seconds			
Peak package body temperature (Tp)	245 °C			
Time within 5 °C of Actual Peak Temperature (t <sub>p</sub> )	< 30 seconds			
Ramp-Down Rate (T <sub>p</sub> to T <sub>L</sub> )	6 °C/second max.			
Time 25 °C to Peak Temperature	8 minutes max.			

REFLOW TIMES: 3 TIMES MAX.



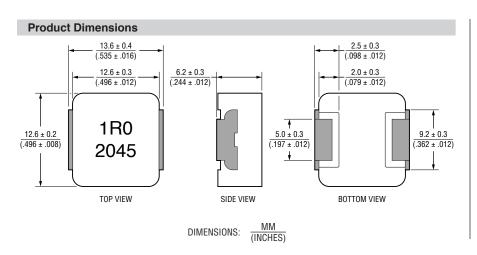
#### **WARNING Cancer and Reproductive Harm** www.P65Warnings.ca.gov

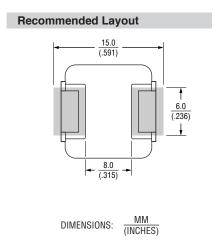
- RoHS Directive 2015/863, Mar 31, 2015 and Annex.
- \* Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (CI) content is 1500 ppm or less.

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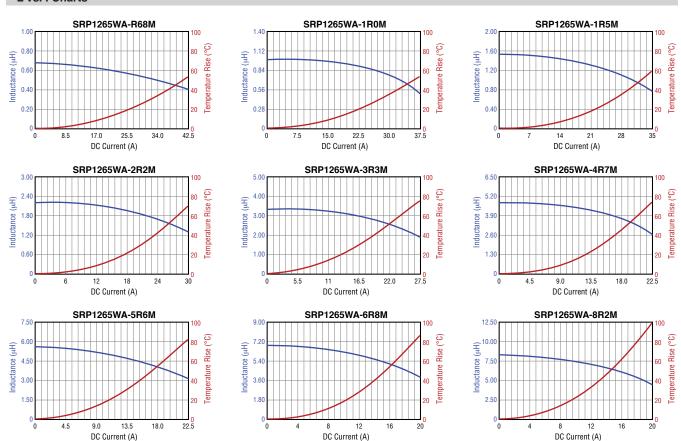
# **SRP1265WA Series - Shielded Power Inductors**

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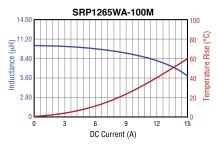


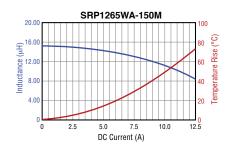
#### L vs. I Charts

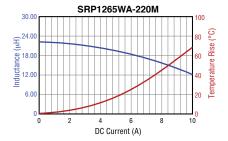


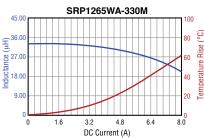
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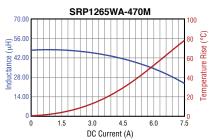
#### L vs. I Charts (continued)









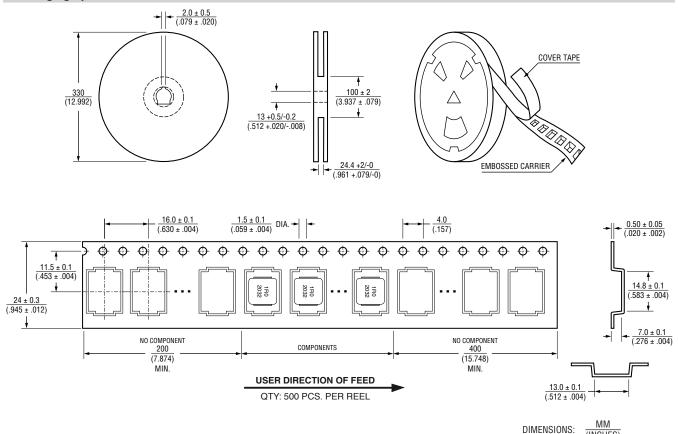


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(INCHES)

#### **Packaging Specifications**



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