



Bourns Releases New Shielded Power Inductors

Model SRP0310F, SRP0312F, SRP0408F, SRP0410F, SRP0412F, SRP0510F, SRP0512F, SRP0610F and SRP0612F Series

Riverside, California – October 31, 2024 – Bourns Magnetics Product Line is introducing the Model [SRP0310F](#), [SRP0312F](#), [SRP0408F](#), [SRP0410F](#), [SRP0412F](#), [SRP0510F](#), [SRP0512F](#), [SRP0610F](#), and [SRP0612F](#) Series Shielded Power Inductors.

These inductor series are manufactured with a metal alloy powder core and shielded construction, featuring high heating/saturation currents and low magnetic field radiation. These new models provide a compact footprint, offering low profiles from 0.7 mm to 1.0 mm. Additionally, the flat wire construction improves the efficiency of this new model by significantly reducing DCR compared to other similarly sized power inductor devices using conventional wire.

These new inductors are well suited for DC-DC converters and power supplies in consumer, industrial, and telecom applications.

Characteristics

Series	Size (mm)	Inductance (μH)	Heating Current I _{rms} (A)	Saturation Current I _{sat} (A)	Operating Temperature (°C)
SRP0310F	3.3 x 3.1 x 0.8	0.47 - 10	1.25 - 6	1.5 - 7	-40 to +125
SRP0312F	3.3 x 3.1 x 1.0	0.3 - 4.7	2.2 - 8.6	2.5 - 9.2	
SRP0408F	4.3 x 4.1 x 0.7	6.8 - 10	1.2 - 1.7	1.5 - 1.9	
SRP0410F	4.3 x 4.1 x 0.8	0.47 - 10	1.7 - 7.5	1.7 - 8.2	
SRP0412F	4.3 x 4.1 x 1.0	0.47 - 10	1.9 - 8.5	2.3 - 11.5	
SRP0510F	5.4 x 5.1 x 0.8	0.47 - 10	2 - 7.7	2.5 - 9.0	
SRP0512F	5.4 x 5.1 x 1.0	0.47 - 10	2.3 - 9	2.7 - 12	
SRP0610F	6.1 x 6.1 x 0.8	0.47 - 10	2.3 - 8.2	3.5 - 10.5	
SRP0612F	6.1 x 6.1 x 1.0	0.47 - 10	2.8 - 8.5	4.0 - 16	

IC24159

Features

- Shielded construction – low radiation
- Low profile
- Metal alloy powder core
- High saturation current
- Low DCR
- Low buzz noise
- RoHS compliant* and halogen free*

Applications

- DC-DC converters
- Power supplies in consumer, industrial, and telecom electronics

For additional product details, visit the Bourns website at www.bourns.com/products/magnetic-products/power-inductors-smd-high-current-shielded. For more information on Bourns® Magnetics, check out our additional available resources in the [Bourns® Magnetics Technical Library](#). Should you have any questions, please contact [Bourns Customer Service/Inside Sales](#).

* 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.