



High Current Flat Wire Power Inductors – REP2918B

PART NUMBERING SYSTEM

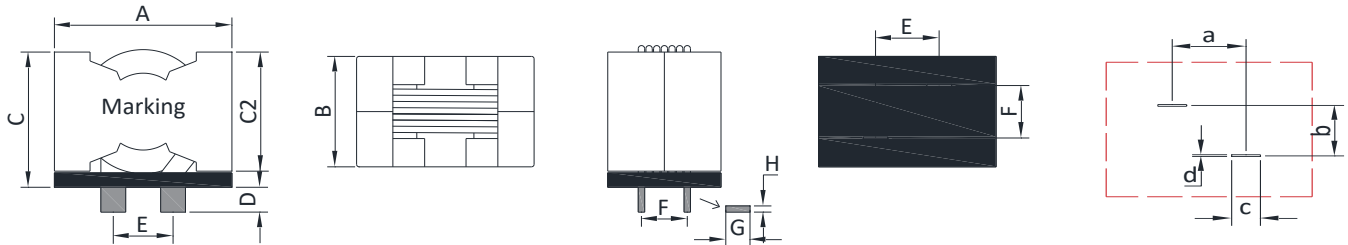
<u>REP</u>	–	<u>2918B</u>	–	<u>4R7</u>	–	<u>LF</u>
TYPE		DIMENSIONS		INDUCTANCE		LEAD FREE

FEATURES :

- Designed with low core loss ferrite material for optimal efficiency.
- Wide inductance range: 3.3μH to 100.0μH, with custom values available.
- High current output chokes supporting up to 89.00 Amps with approximately 30% roll-off.
- Flat wire winding reduces both DC and AC resistance, ensuring minimal energy loss.
- Compact vertical mounting for space-saving design.
- Operating temperature range: -55°C to +130°C, suitable for extreme environments.
- Fully RoHS and HF compliant for safety and sustainability.
- Customized part available



SHAPES AND DIMENSIONS :



A=27.9Max B=17.8Max C=22.8Max C2=19.2Ref D=4.0±1.0 E=10.5±0.5 F=5.5±0.5 G=3.8±0.2 a=11.3Ref b=6.7 Ref c=4.5 Ref UNIT : mm

APPLICATIONS :

- **Power Supply Units (PSUs):** Used in switched-mode power supplies (SMPS) for filtering and energy storage due to their high current handling capabilities and low resistance.
- **Automotive Electronics:** Ideal for electric vehicles (EVs), hybrid systems, and powertrain control modules where space and efficiency are critical, and the ability to handle high currents is essential.
- **Industrial Power Systems:** Used in heavy machinery, robotics, and automation systems where high current flow is required for motors, drives, and control systems.
- **Telecommunication Equipment:** In communication infrastructure, such as base stations and data centers, these inductors help with power regulation and signal filtering.
- **DC-DC Converters:** Frequently used in high-efficiency converters for renewable energy systems (solar, wind) and battery management systems.
- **Inverters:** Applied in inverters for solar energy systems, industrial motor drives, and UPS systems where high current and stable operation are necessary.



SPECIFICATION TABLE

PART NUMBER	INDUCTANCE (μH)	Isat (A) (Typ.)	Irms (A) (Typ.)	DCR (mΩ) (Max.)	Dimension H (mm)
REP2918B-3R3M-LF	3.3±20%	89.0	31.0	2.42	0.8±0.2
REP2918B-4R7M-LF	4.7±20%	65.0	31.0	2.42	0.8±0.2
REP2918B-6R8M-LF	6.8±20%	46.0	31.0	2.42	0.8±0.2
REP2918B-8R2M-LF	8.2±20%	39.4	31.0	2.42	0.8±0.2
REP2918B-100M-LF	10±20%	34.1	26.8	3.19	0.7±0.2
REP2918B-120M-LF	12±20%	32.0	26.8	3.19	0.7±0.2
REP2918B-150M-LF	15±20%	28.1	25.5	3.52	0.7±0.2
REP2918B-180M-LF	18±20%	25.6	22.0	4.62	0.6±0.2
REP2918B-220M-LF	22±20%	23.0	19.0	6.49	0.5±0.2
REP2918B-330M-LF	33±20%	19.8	15.6	9.46	0.4±0.2
REP2918B-390M-LF	39±20%	18.1	15.6	9.46	0.4±0.2
REP2918B-470M-LF	47±20%	17.4	13.7	12.32	0.35±0.2
REP2918B-500M-LF	50±20%	16.2	13.7	12.32	0.35±0.2
REP2918B-560M-LF	56±20%	15.2	12.0	16.17	0.3±0.2
REP2918B-620M-LF	62±20%	14.0	12.0	16.17	0.3±0.2
REP2918B-680M-LF	68±20%	12.9	12.0	16.17	0.3±0.2
REP2918B-860M-LF	86±20%	10.5	12.0	16.17	0.3±0.2
REP2918B-101M-LF	100±20%	8.9	11.5	17.05	0.3±0.2

- Test condition: 25℃ 300KHz/0.1V
- All data is tested based on 25℃ ambient temperature.
- Saturation current: DC current that causes inductance to drop 30%.
- Temperature rise current: DC current for temperature rise of 40℃ without core loss.
- Derating is necessary for AC currents, PCB pad layout, trace thickness and width, air-flow and proximity of other heat generating components will affect the temperature rise. It is recommended the part temperature should not exceed 130℃ under worst case operating conditions verified in the end application.

PACKAGING SPECIFICATION

STAYLE	Q'TY (PCS)	CARTON DIMENSIONS (m/m)					
		A	B	C	N	Material	-
TRAY	280	340	215	220	8	Paper	-