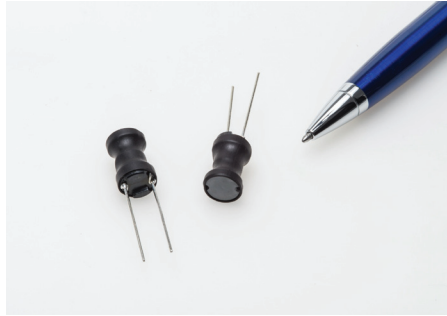


RL1218

Unshielded radial leaded drum core inductors



Product features

- Unshielded, leaded drum core
- Protective sleeving over winding
- Inductance range from 4.7 μ H to 12,000 μ H
- Current range from 0.20 A to 15 A
- 12.2 mm OD x 18.0 mm through-hole package
- Ferrite core material

Applications

- LED Drivers and lighting
- Utility meters
- Appliances and white goods
- Motor drives
- Power supplies
- General purpose filtering

Environmental data

- Storage temperature range (Component): -40 °C to +125 °C
- Operating temperature range: -40 °C to +125 °C (ambient plus self-temperature rise)



Product specifications

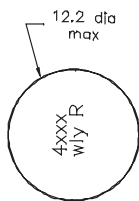
Part Number ⁴	OCL ¹ (μ H) $\pm 10\%$	I_{rms}^2 (A)	I_{sat}^3 (A)	DCR (Ω) @ +20 °C max.	SRF (MHz) typ.
RL1218-4R7-R	4.7 $\pm 20\%$	5.65	15.0	0.017	34
RL1218-8R2-R	8.2 $\pm 20\%$	4.75	10.7	0.025	25
RL1218-100-R	10	4.61	10.2	0.026	21
RL1218-150-R	15	4.05	8.00	0.034	11
RL1218-220-R	22	3.64	6.60	0.042	8
RL1218-270-R	27	3.44	5.97	0.047	6
RL1218-330-R	33	3.27	5.45	0.052	5
RL1218-101-R	100	2.31	3.16	0.102	3
RL1218-151-R	150	1.89	2.56	0.159	3
RL1218-181-R	180	1.64	2.34	0.211	3
RL1218-221-R	220	1.53	2.10	0.241	2
RL1218-331-R	330	1.25	1.73	0.366	2
RL1218-561-R	560	0.968	1.33	0.606	1
RL1218-102-R	1000	0.677	0.992	1.23	1
RL1218-152-R	1500	0.597	0.809	1.59	0.81
RL1218-472-R	4700	0.322	0.457	5.46	0.40
RL1218-562-R	5600	0.305	0.418	6.11	0.40
RL1218-682-R	6800	0.263	0.379	8.20	0.36
RL1218-123-R	12,000	0.201	0.286	14.1	0.28

1. Open Circuit Inductance (OCL) Test Parameters: 10 kHz, 0.1 V_{rms}, 0.0 Adc, +25 °C
2. I_{rms}²: DC current for an approximate temperature rise of 40 °C without core loss. Derating is necessary for AC currents. PCB layout, trace thickness and width, air-flow, and proximity of other heat generating components will affect the temperature rise. It is recommended that the temperature of the part not exceed +125 °C under worst case operating conditions verified in the end application.

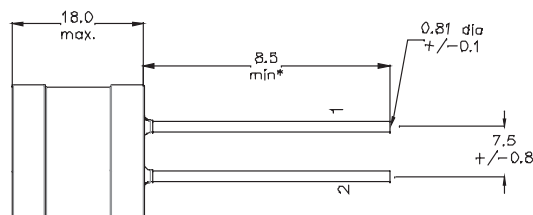
3. I_{sat}³: Peak current for approximately 5% rolloff at +25 °C
4. Part Number Definition: RL1218-yyy-R
 - RL1218 = Product code and size
 - yyy= Inductance value in μ H, R = decimal point, if no R is present then third character = number of zeros.
 - "-R" suffix = RoHS compliant

Dimensions - mm

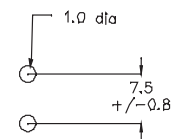
Top view



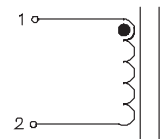
Side view



Recommended pad layout



Schematic



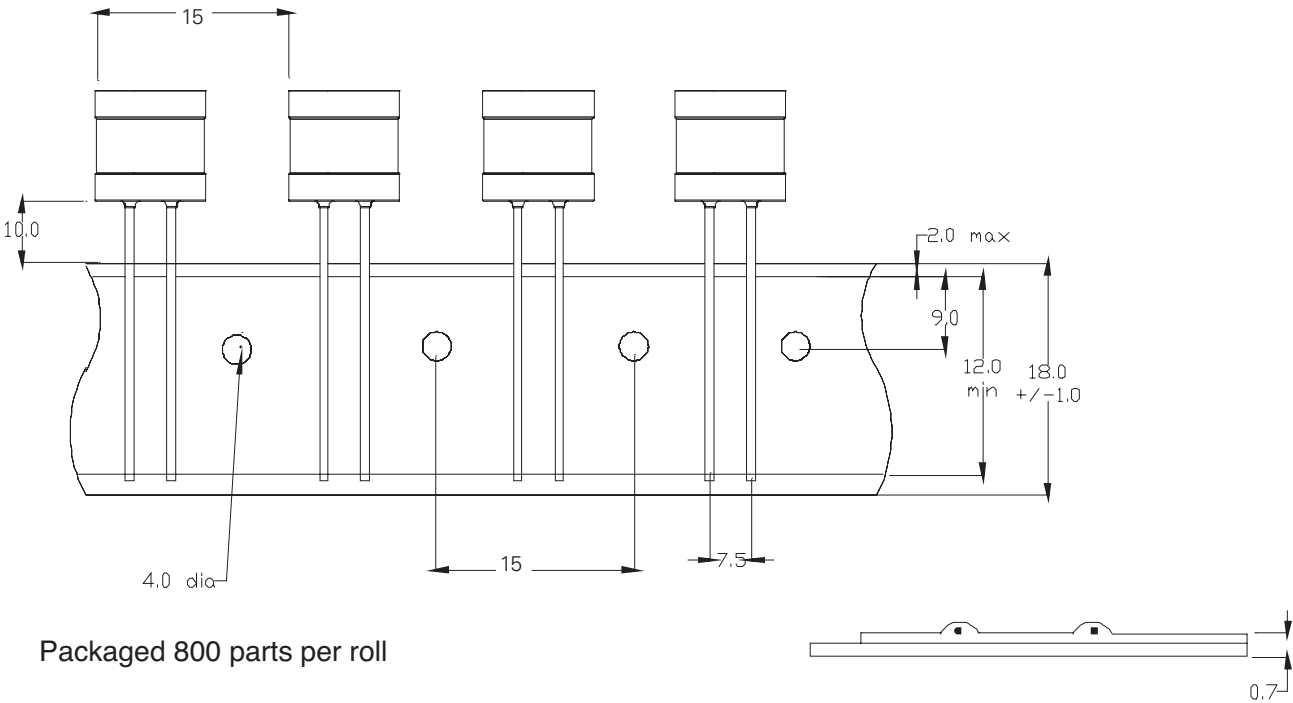
Part marking: 4xxx
wly R

4 = RL1218

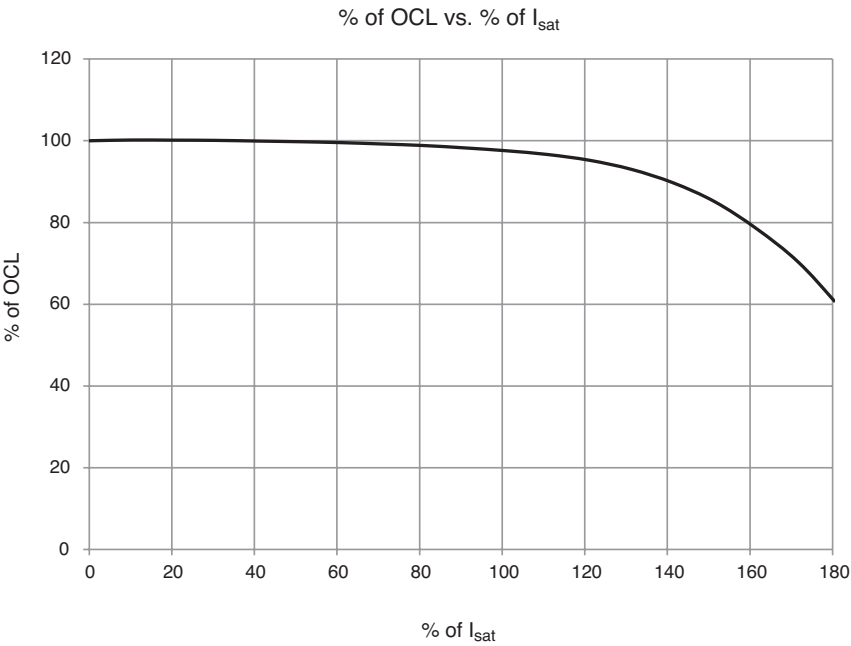
xxx = inductance in μ H, R = decimal point; if there is no "R" then third character = number of zeros
wly = date code, R = revision level

* Lead length is after the components are trimmed from the packaging tape roll.
Do not route traces or vias underneath the inductor

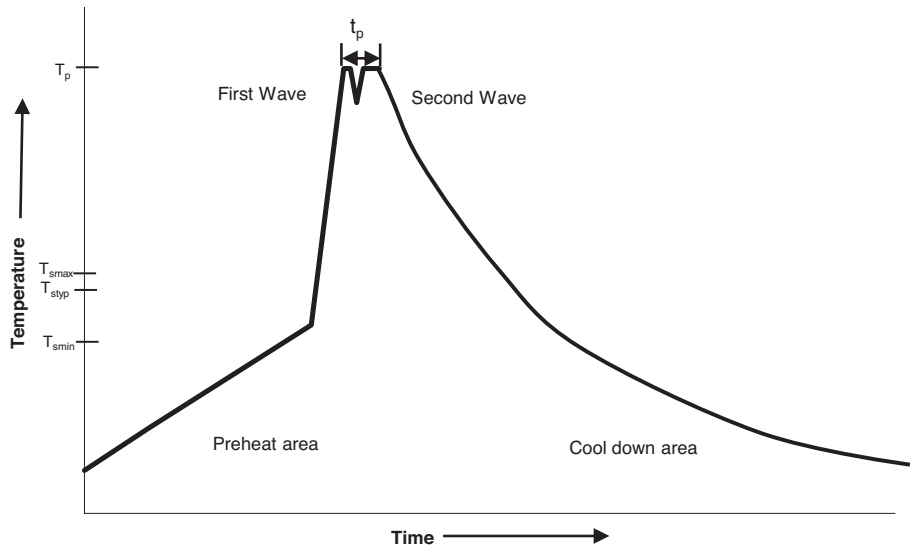
Packaging information - mm



Inductance characteristics



Wave solder profile



Reference EN 61760-1:2006

Profile Feature	Standard SnPb Solder	Lead (Pb) Free Solder
Preheat		
Temperature min. (T_{smin})	100°C	100°C
Temperature typ. (T_{styp})	120°C	120°C
Temperature max. (T_{smax})	130°C	130°C
Time (T_{smin} to T_{smax}) (t_s)	70 seconds	70 seconds
Δ preheat to max Temperature	150°C max.	150°C max.
Peak temperature (T_p)	235°C - 260°C	250°C - 260°C
Time at peak temperature (t_p)	10 seconds max 5 seconds max each wave	10 seconds max 5 seconds max each wave
Ramp-down rate	~ 2 K/s min ~3.5 K/s typ ~5 K/s max	~ 2 K/s min ~3.5 K/s typ ~5 K/s max
Time 25°C to 25°C	4 minutes	4 minutes

Manual solder

350°C, 4-5 seconds. (by soldering iron), generally manual, hand soldering is not recommended.

Life Support Policy: Eaton does not authorize the use of any of its products for use in life support devices or systems without the express written approval of an officer of the Company. Life support systems are devices which support or sustain life, and whose failure to perform, when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in significant injury to the user.

Eaton reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Eaton also reserves the right to change or update, without notice, any technical information contained in this bulletin.

Eaton
Electronics Division
1000 Eaton Boulevard
Cleveland, OH 44122
United States
www.eaton.com/electronics

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru

moschip.ru_4

moschip.ru_6

moschip.ru_9