



## Features

- Magnetically shielded
- Flat wirewound
- Low DCR
- High saturation current
- Extra solder pad for increased mechanical stability
- AEC-Q200 qualified
- RoHS compliant\* and halogen free\*\*

## Applications

- Automotive - power conversion
- DC/DC converters
- Switch-mode power supplies
- High current Point-of-Load

## PQ2614BLA/BHA Series - Shielded Power Inductors

### Electrical Specifications @ 25 °C

| Bourns Part Number | Inductance @ 100 kHz / 0.1 V |          | SRF (MHz) Typ. | DCR (mΩ) Typ. | DCR (mΩ) Max. | Irms (A) Typ. | Isat1 (A) Typ. | Isat2 (A) Typ. |
|--------------------|------------------------------|----------|----------------|---------------|---------------|---------------|----------------|----------------|
|                    | L (μH)                       | Tol. (%) |                |               |               |               |                |                |
| PQ2614BLA-1R0K     | 1.0                          | ± 10     | 61             | 0.85          | 1.20          | 30            | >100           | >100           |
| PQ2614BLA-1R5K     | 1.5                          | ± 10     | 60             | 1.29          | 1.60          | 30            | >100           | >100           |
| PQ2614BHA-2R2K     | 2.2                          | ± 10     | 40             | 1.62          | 1.90          | 30            | >100           | >100           |
| PQ2614BLA-2R2K     | 2.2                          | ± 10     | 50             | 1.29          | 1.60          | 30            | 84.0           | 84.8           |
| PQ2614BHA-3R3K     | 3.3                          | ± 10     | 30             | 1.62          | 1.90          | 30            | 66.9           | 68.4           |
| PQ2614BLA-3R3K     | 3.3                          | ± 10     | 40             | 1.29          | 1.60          | 30            | 54.0           | 57.0           |
| PQ2614BHA-4R7K     | 4.7                          | ± 10     | 25             | 1.62          | 1.90          | 30            | 48.0           | 50.1           |
| PQ2614BLA-4R7K     | 4.7                          | ± 10     | 30             | 1.29          | 1.60          | 30            | 36.9           | 39.0           |
| PQ2614BHA-6R8K     | 6.8                          | ± 10     | 20             | 1.62          | 1.90          | 30            | 34.5           | 36.2           |
| PQ2614BLA-6R8K     | 6.8                          | ± 10     | 25             | 1.29          | 1.60          | 30            | 26.0           | 27.8           |
| PQ2614BLA-100K     | 10                           | ± 10     | 15             | 1.62          | 1.90          | 30            | 21.5           | 23.4           |
| PQ2614BLA-100K     | 10                           | ± 10     | 20             | 1.29          | 1.60          | 30            | 16.2           | 17.6           |
| PQ2614BHA-150K     | 15                           | ± 10     | 12             | 1.62          | 1.90          | 30            | 14.0           | 15.2           |
| PQ2614BLA-150K     | 15                           | ± 10     | 15             | 1.29          | 1.60          | 30            | 9.8            | 11.0           |
| PQ2614BHA-220K     | 22                           | ± 10     | 10             | 1.62          | 1.90          | 30            | 8.6            | 9.6            |
| PQ2614BLA-220K     | 22                           | ± 10     | 10             | 1.29          | 1.60          | 30            | 6.0            | 6.8            |
| PQ2614BHA-330K     | 33                           | ± 10     | 8              | 1.62          | 1.90          | 30            | 5.1            | 5.9            |
| PQ2614BLA-330K     | 33                           | ± 10     | 7              | 1.29          | 1.60          | 30            | 2.6            | 3.3            |

### How to Order

**PQ2614B A - 100K**

Model \_\_\_\_\_  
 Current \_\_\_\_\_  
 L = Low Isat  
 H = High Isat  
 AEC-Q200 Qualified \_\_\_\_\_  
 Value Code (see table) \_\_\_\_\_

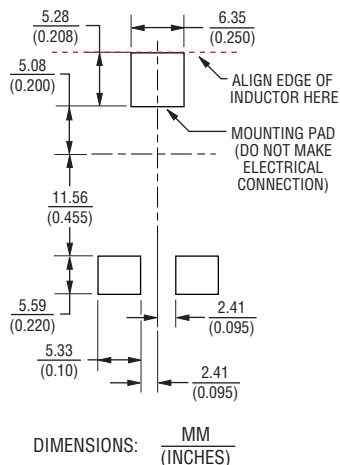
### Typical Part Marking

SERIES \_\_\_\_\_ VALUE CODE \_\_\_\_\_

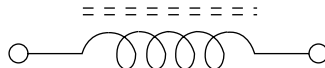
PQ2614BLA-1R0K  
YYWW X

DATE CODE MARKING:  
 YY = YEAR  
 WW = WEEK  
 X = A - MONDAY  
 B - TUESDAY  
 C - WEDNESDAY  
 D - THURSDAY  
 E - FRIDAY  
 F - SATURDAY  
 G - SUNDAY

### Recommended Layout



### Electrical Schematic



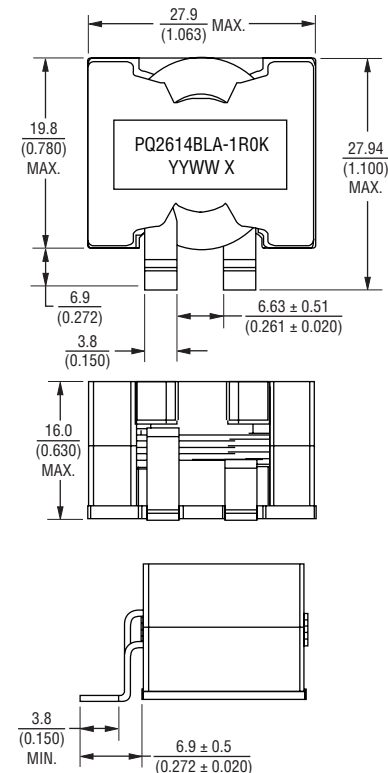
### General Specifications

Dielectric Withstand Voltage -  
 Terminal to Core .... 300 VDC 5 mA max.  
 Operating Temperature  
 ..... -40 °C to +155 °C  
 (Temperature rise included)  
 Storage Temperature (Component)  
 ..... -40 °C to +155 °C  
 Rated Current  
 ..... Inductance drops 20 % at Isat1  
 Inductance drops 30 % at Isat2  
 Temperature Rise ..... 40 °C at rated Irms  
 Moisture Sensitivity Level ..... 1  
 ESD Classification (HBM) ..... N/A

### Materials

Core ..... Ferrite  
 Wire ..... Enameled copper  
 Terminal Finish ..... Sn  
 Packaging ..... 25 pcs/tray

### Product Dimensions



\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

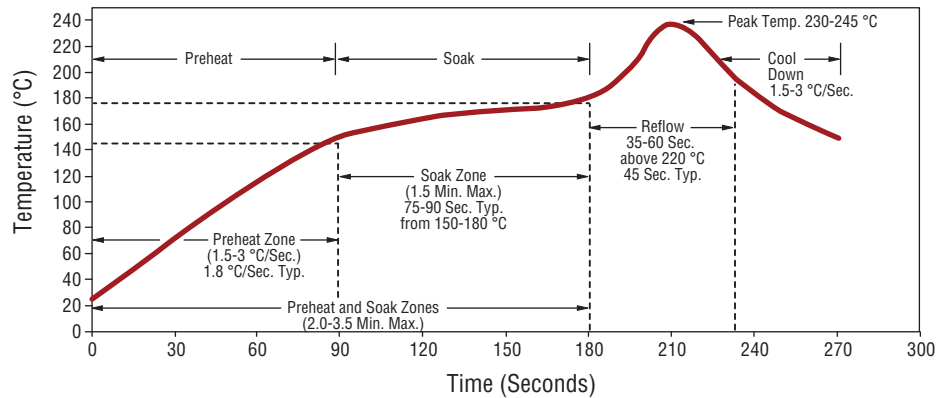
\*\*Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

DIMENSIONS: MM (INCHES)

**Soldering Profile**



**BOURNS®**

**Asia-Pacific:** Tel: +886-2 2562-4117 • Email: [asiacus@bourns.com](mailto:asiacus@bourns.com)

**EMEA:** Tel: +36 88 520 390 • Email: [eurocus@bourns.com](mailto:eurocus@bourns.com)

**The Americas:** Tel: +1-951 781-5500 • Email: [americus@bourns.com](mailto:americus@bourns.com)

**[www.bourns.com](http://www.bourns.com)**