Radial-leaded Inductor – *RCB1823 SERIES*

1. Part No. Expression

R C B 1 8 2 3 1 0 0 M Z F

(a) (b) (c) (d) (e) (f)

(a)	Series Code	(d)	Tolerance Code
(b)	Dimension Code	(e)	Special Code
(c)	Inductance Code	(f)	Packaging Code

2. Configuration & Dimensions (Unit: mm)

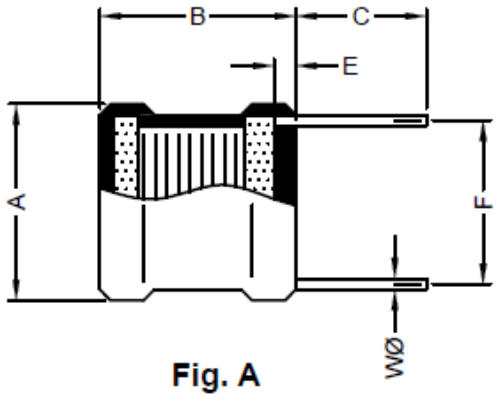


Fig. A

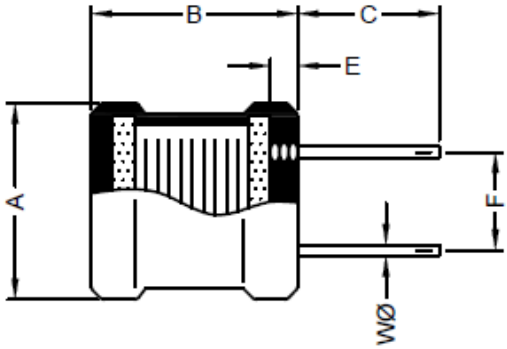
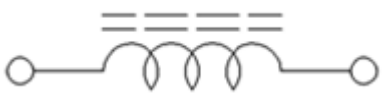


Fig. B

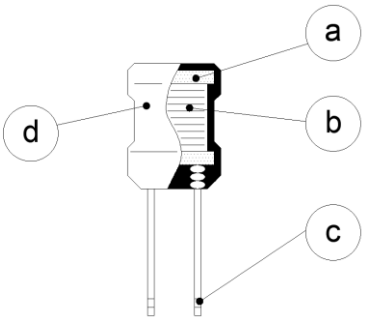
A	B	C	E	F	W
18.0 Max	23.0 Max	15.0±5.0	3.0 Max	See Electrical Characteristic	See Electrical Characteristic

3. Schematic



NOTE: Specifications subject to change without notice. Please check our website for latest information.

4. Material List



(a) Core
(b) Wire
(c) Solder
(d) Tube

5. General Specifications

(a) Operating Temp.: -40°C to +125°C (including self-temperature rise)
(b) Storage Temp.: -40°C to +125°C (on board)
(c) All test data referenced to 25°C ambient.
(d) Heat Rated Current (Irms) will cause the coil temperature rise approximately ΔT of 45°C.
(e) Saturation Current (Isat) will cause inductance L0 to drop approximately 10%.
(f) Rated Current: The lower value of Irms and Isat.
(g) Storage Condition (Component in its packaging)
  i) Temperature: 40°C
  ii) Humidity: 60% RH

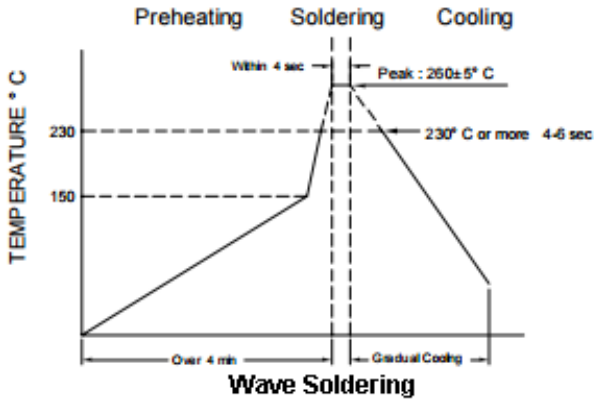
6. Electrical Characteristics

Part Number	Inductance (μH) @0A	DCR (Ω) Max	Rated Current (A) Max	Dimensions		Fig
				F (mm)	W (mm)	
RCB1823100MZF	10±20%	0.009	8.0	14.0	1.2	A
RCB1823250KZF	25±10%	0.022	6.0	14.0	1.0	A
RCB1823500KZF	50±10%	0.036	4.0	14.0	1.0	A
RCB1823101KZF	100±10%	0.090	3.0	9.0	1.0	B
RCB1823251KZF	250±10%	0.150	2.0	9.0	1.0	B
RCB1823501KZF	500±10%	0.300	1.2	9.0	1.0	B
RCB1823102KZF	1000±10%	0.600	1.0	9.0	1.0	B

Test Frequency: 1.0V/1kHz

7. Soldering Specification

Mildly activated rosin fluxes are preferred. The minimum amount of solder can lead to damage from the stresses caused by the difference in coefficients of expansion between solder, chip and substrate. Our terminations are suitable for wave soldering.



Wave Soldering

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8. Packaging Information (Unit: Pcs)

Chip/Tray	Outer Box
100	2,000

Application Notice

1. Storage Conditions

To maintain the solderability of terminal electrodes:

(a) Recommended products should be used within 12 months from the time of delivery.

(b) The packaging material should be kept where no chlorine or sulfur exists in the air.

2. Transportation

(a) Products should be handled with care to avoid damage or contamination from perspiration and skin oils.

(b) Vacuum pick up is strongly recommended for individual components.

(c) Bulk handling should ensure that abrasion and mechanical shock are minimized.