Radial-leaded Inductor – *RCB0506(Z) Series*

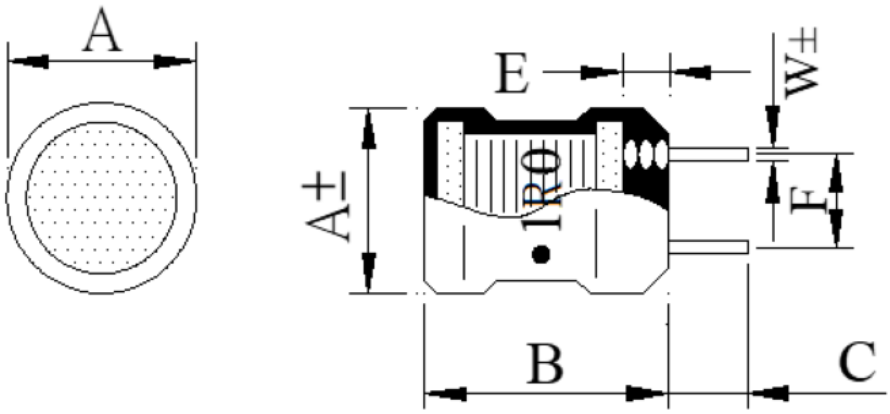
1. Part No. Expression

R C B 0 5 0 6 1 R 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

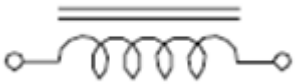
2. Configuration & Dimensions (Unit: mm)



Note: Marking: "●" Start + Inductance Code

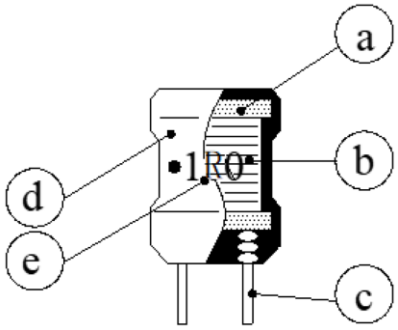
A	B	C	E	F	W
5.0±0.5	6.5+1.0/-0.5	3.0±1.0	2.5 Max	2.0±0.5	0.5±0.1

3. Schematic



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

4. Material List



No.	Description	Specification
a	Core	Ferrite Core or Equivalent
b	Wire	Enamelled Copper Wire (155°C) or Equivalent
c	Lead	Tinned Copper Wire or Equivalent
d	Tube	UL Heat Shrink Tube or Equivalent
e	Ink	White

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) Heat Rated Current (Irms) will cause the coil temperature rise ΔT of 20°C Max.

(d) Storage Condition (Component in its packaging)

i) Temperature: Less than 40°C

ii) Humidity: Less than 60% RH

6. Electrical Characteristics

Part Number	Inductance (μH) @0A	Q Min	Test Frequency		SRF (MHz) Min	DCR (Ω) Max	IDC (mA) Max
			L	Q			
RCB05061R0MZF	1.0±20%	60	1V/7.96MHz		105.0	0.10	1030
RCB05061R2MZF	1.2±20%	60	1V/7.96MHz		90.0	0.15	980
RCB05061R5MZF	1.5±20%	60	1V/7.96MHz		75.0	0.20	920
RCB05061R8MZF	1.8±20%	60	1V/7.96MHz		70.0	0.22	880
RCB05062R2MZF	2.2±20%	60	1V/7.96MHz		65.0	0.24	830
RCB05062R7MZF	2.7±20%	60	1V/7.96MHz		60.0	0.27	790
RCB05063R3MZF	3.3±20%	60	1V/7.96MHz		50.0	0.30	750
RCB05063R9MZF	3.9±20%	60	1V/7.96MHz		45.0	0.30	720
RCB05064R7MZF	4.7±20%	60	1V/7.96MHz		40.0	0.35	670

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Part Number	Inductance (μH) @0A	Q Min	Test Frequency	SRF (MHz) Min	DCR (Ω) Max	IDC (mA) Max
RCB05065R6KZF	5.6±10%	60	1V/7.96MHz	35.0	0.35	640
RCB05066R8KZF	6.8±10%	60	1V/7.96MHz	30.0	0.40	620
RCB05068R2KZF	8.2±10%	60	1V/7.96MHz	25.0	0.40	590
RCB0506100KZF	10.0±10%	60	1V/2.52MHz	20.0	0.45	550
RCB0506120KZF	12.0±10%	60	1V/2.52MHz	15.0	0.50	530
RCB0506150KZF	15.0±10%	60	1V/2.52MHz	13.0	0.55	500
RCB0506180KZF	18.0±10%	60	1V/2.52MHz	11.0	0.60	480
RCB0506220KZF	22.0±10%	60	1V/2.52MHz	10.0	0.65	460
RCB0506270KZF	27.0±10%	50	1V/2.52MHz	9.0	0.75	430
RCB0506330KZF	33.0±10%	50	1V/2.52MHz	8.0	0.85	410
RCB0506390KZF	39.0±10%	50	1V/2.52MHz	7.5	0.90	390
RCB0506470KZF	47.0±10%	50	1V/2.52MHz	7.0	1.00	370
RCB0506560KZF	56.0±10%	50	1V/2.52MHz	6.5	1.20	350
RCB0506680KZF	68.0±10%	50	1V/2.52MHz	6.0	1.30	340
RCB0506820KZF	82.0±10%	50	1V/2.52MHz	5.5	1.50	320
RCB0506101KZF	100.0±10%	50	1V/0.796MHz	5.0	1.70	305
RCB0506121KZF	120.0±10%	50	1V/0.796MHz	4.8	1.90	290
RCB0506151KZF	150.0±10%	50	1V/0.796MHz	4.4	2.10	275
RCB0506181KZF	180.0±10%	50	1V/0.796MHz	4.2	2.30	235
RCB0506221KZF	220.0±10%	45	1V/0.796MHz	3.8	2.50	200
RCB0506271KZF	270.0±10%	45	1V/0.796MHz	3.6	2.75	180
RCB0506331KZF	330.0±10%	45	1V/0.796MHz	3.3	4.68	165
RCB0506391KZF	390.0±10%	45	1V/0.796MHz	3.0	6.00	150
RCB0506471KZF	470.0±10%	55	1V/0.796MHz	2.8	6.50	140
RCB0506561KZF	560.0±10%	55	1V/0.796MHz	2.4	8.50	135
RCB0506681KZF	680.0±10%	55	1V/0.796MHz	2.2	9.00	125
RCB0506821KZF	820.0±10%	55	1V/0.796MHz	2.0	9.60	120
RCB0506102KZF	1000.0±10%	55	1V/0.252MHz	1.8	11.50	100

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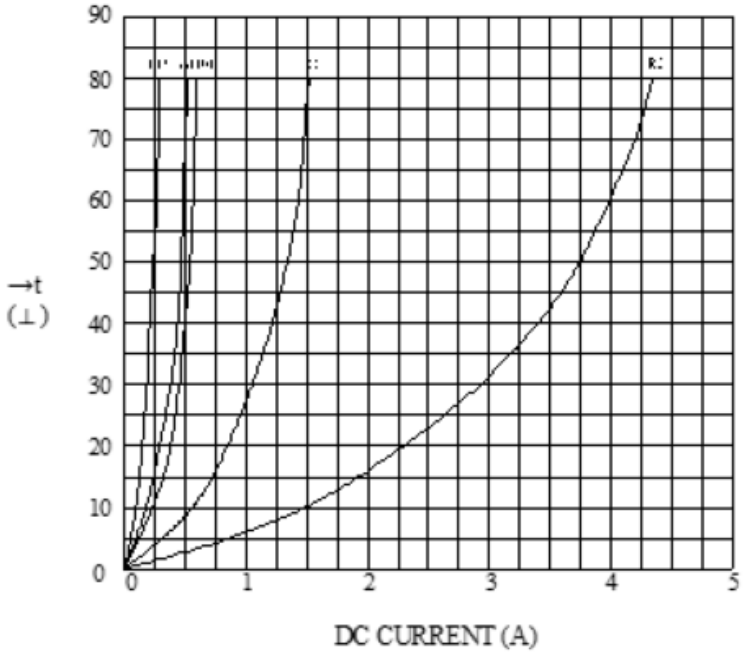
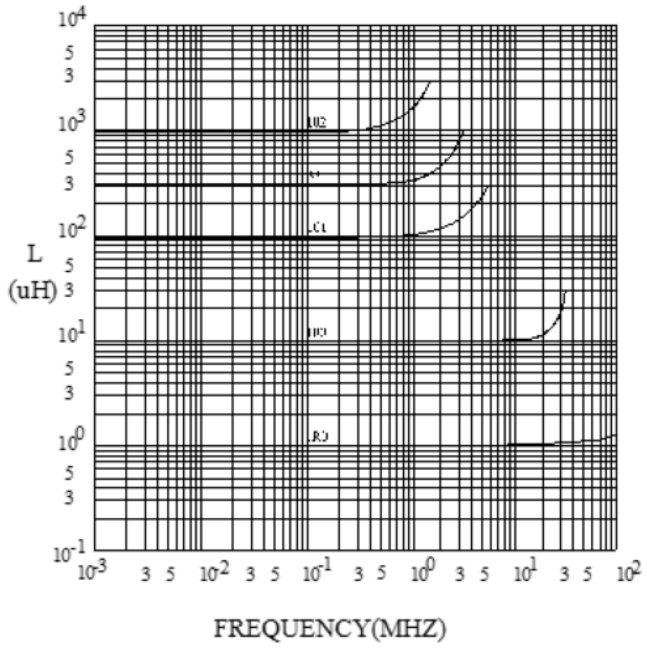
7. Characteristics Curve

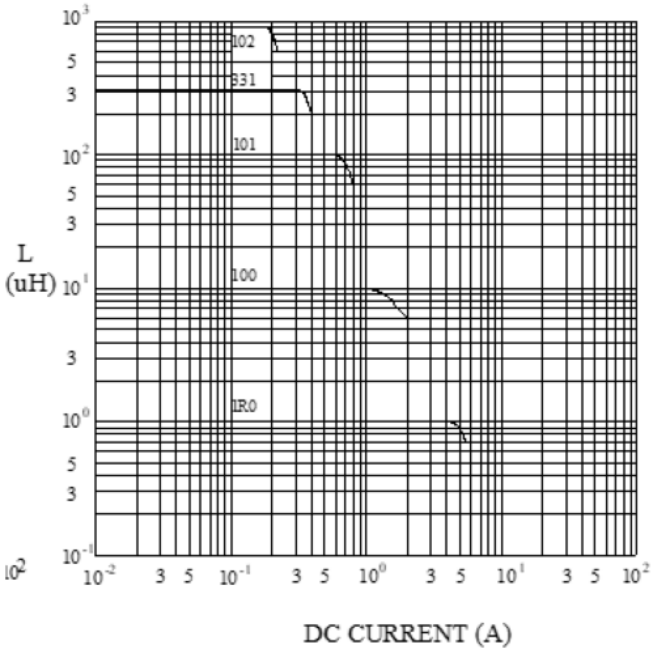
@ TEMP. RISE VS. DC SUPERPOSITION RESPONSE CURVE



@ INDUCTANCE VS. FREQUENCY RESPONSE CURVE



@ INDUCTANCE VS. DC SUPERPOSITION RESPONSE CURVE



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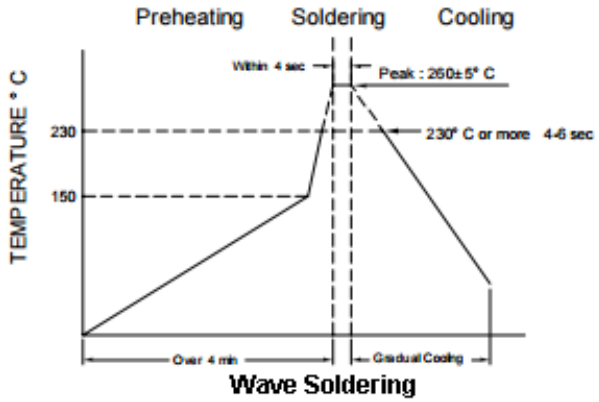
8. Soldering Specification

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

9. Packaging Information

PACKAGE	INNER PACKAGE Q'TY	OUTER PACKAGE Q'TY
TRAY	180 PCS	3600 PCS

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.

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