Radial-leaded Inductor – *RCS0807 Series*

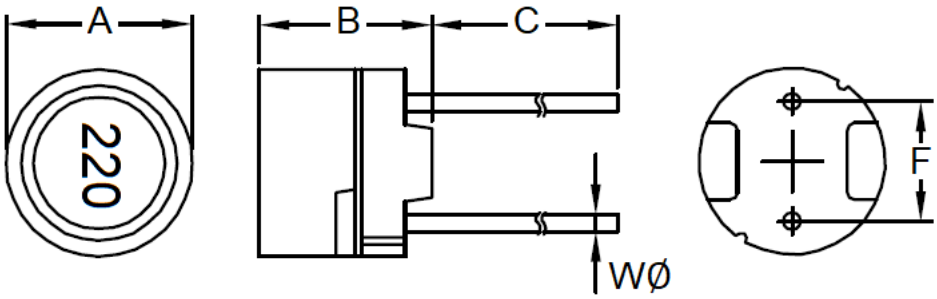
1. Part No. Expression

R C S 0 8 0 7 2 2 0 L 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

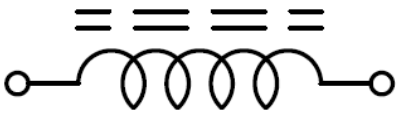
2. Configuration & Dimensions (Unit: mm)



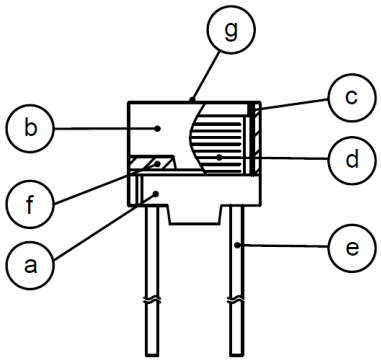
Note: Marking: Inductance Code

A	B	C	F	W
7.80±0.50	7.50 Max	15.00±3.00	5.00±0.50	0.65±0.10

3. Schematic



4. Material List



(a) DR Core
(b) RI Core
(c) Sleeve
(d) Wire
(e) Lead
(f) Adhesive
(g) Ink

5. General Specifications

(a) Operating Temp.: - 40°C to + 85°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 40°C Max.
(d) Saturation Current (Isat) will cause inductance L0 to drop 10% Max.
(e) Storage Condition (Component in its packaging)
    i) Temperature: Less than 40°C
    ii) Humidity: Less than 60% RH

6. Electrical Characteristics

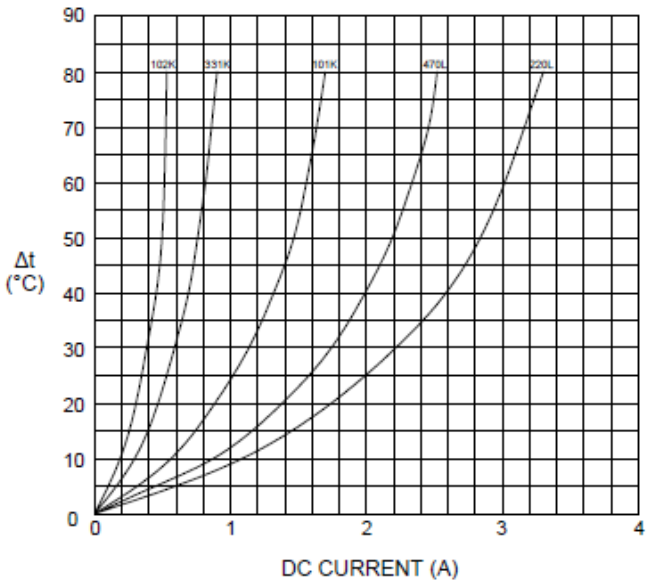
Part Number	Inductance (μH) @0A	Test Frequency	RDC (Ω) Max	IDC (A) Max
RCS0807220LZF	22	1V/2.52MHz	0.08	1.60
RCS0807270LZF	27	1V/2.52MHz	0.10	1.40
RCS0807330LZF	33	1V/2.52MHz	0.14	1.30
RCS0807390LZF	39	1V/2.52MHz	0.15	1.20
RCS0807470LZF	47	1V/2.52MHz	0.17	1.10
RCS0807560KZF	56	1V/2.52MHz	0.19	0.99
RCS0807680KZF	68	1V/2.52MHz	0.21	0.89
RCS0807820KZF	82	1V/2.52MHz	0.27	0.81
RCS0807101KZF	100	1V/1KHz	0.32	0.74
RCS0807121KZF	120	1V/1KHz	0.36	0.67
RCS0807151KZF	150	1V/1KHz	0.51	0.60
RCS0807181KZF	180	1V/1KHz	0.57	0.55
RCS0807221KZF	220	1V/1KHz	0.76	0.50
RCS0807271KZF	270	1V/1KHz	0.86	0.45
RCS0807331KZF	330	1V/1KHz	0.97	0.41
RCS0807391KZF	390	1V/1KHz	1.28	0.37
RCS0807471KZF	470	1V/1KHz	1.44	0.34
RCS0807561KZF	560	1V/1KHz	1.61	0.31
RCS0807681KZF	680	1V/1KHz	2.07	0.28
RCS0807821KZF	820	1V/1KHz	2.33	0.26
RCS0807102KZF	1000	1V/1KHz	2.72	0.23

Note:

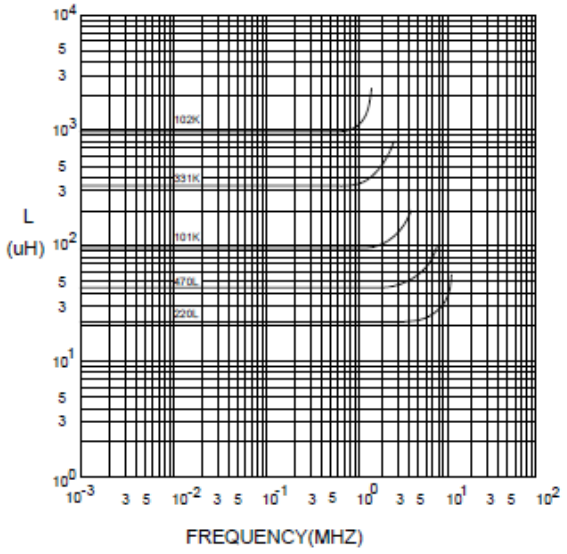
Tolerance code: K=±10%, L=±15%

7. Characteristics Curves

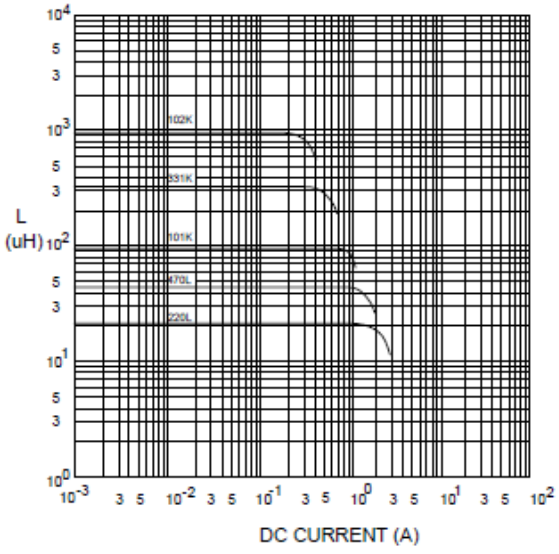
@ TEMP. RISE VS. DC SUPERPOSITION RESPONSE CURVE



@ INDUCTANCE VS. FREQUENCY RESPONSE CURVE



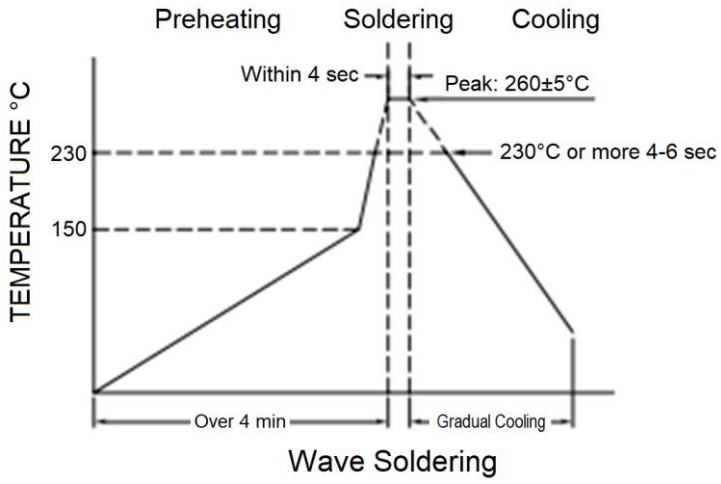
@ INDUCTANCE VS. FREQUENCY RESPONSE CURVE



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

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.



9. Packaging Information (Unit: Pcs)

INNER PACKAGE	INNER PACKAGE Q'TY
TRAY	100

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.

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