

Radial Lead Inductors(Coils) For Signal Line

Conformity to RoHS Directive

EL Series EL0607

FEATURES

- The EL series inductors are available in ranging from 0405 to 0909 types.
- With a miniature winding construction, these inductors nonetheless achieve high Q characteristics.
- Available in tape packaging to support automated mounting machines.
- Terminal platings and internal connecting solder use lead-free materials.
- It is a product conforming to RoHS directive.

APPLICATIONS

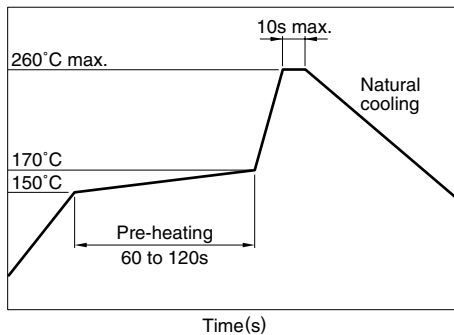
Televisions, VCRs, personal computers, and other electronic equipment.

SPECIFICATIONS

Operating temperature range	-20 to +80°C [Including self-temperature rise]
Storage temperature range	-40 to +80°C [Unit of products]
Terminal tensile strength	14.7N min.

RECOMMENDED SOLDERING CONDITIONS

FLOW SOLDERING



IRON SOLDERING

Tip temperature	350°C max.
Heating time	5 seconds/soldering

- The use of reflow soldering is not guaranteed.

PRODUCT IDENTIFICATION

EL	0607	RA-	100	J	- PF
(1)	(2)	(3)	(4)	(5)	(6)

(1)Series name

(2)Dimensions

0607	7.4×6.2×10mm (lead pitch 5mm)
------	-------------------------------

(3)Packaging style

RA	Ammo-pack
SKI	Bulk

(4)Inductance value

100	10μH
101	100μH
102	1000μH

(5)Inductance tolerance

J	±5%
---	-----

(6)Lead-free compatible product

PF	Lead-free compatible product
----	------------------------------

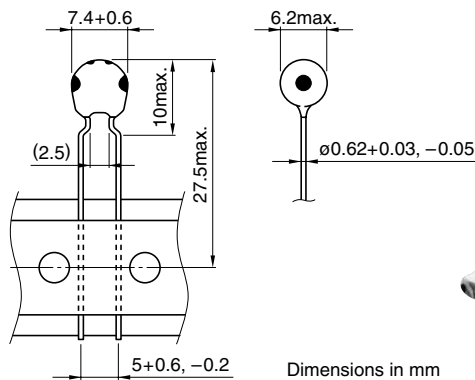
PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Ammo-pack	2000 pieces
Bulk	1000 pieces/pack

- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

- All specifications are subject to change without notice.

AMMO-PACK TAPING STYLE SHAPES AND DIMENSIONS



CHARACTERISTICS

Operating temperature range	-20 to +80°C [Including self-temperature rise 20°C max.]
Rated current	Based on inductance change [-10% to the initial value]
Terminal tensile strength	14.7N min.

ELECTRICAL CHARACTERISTICS

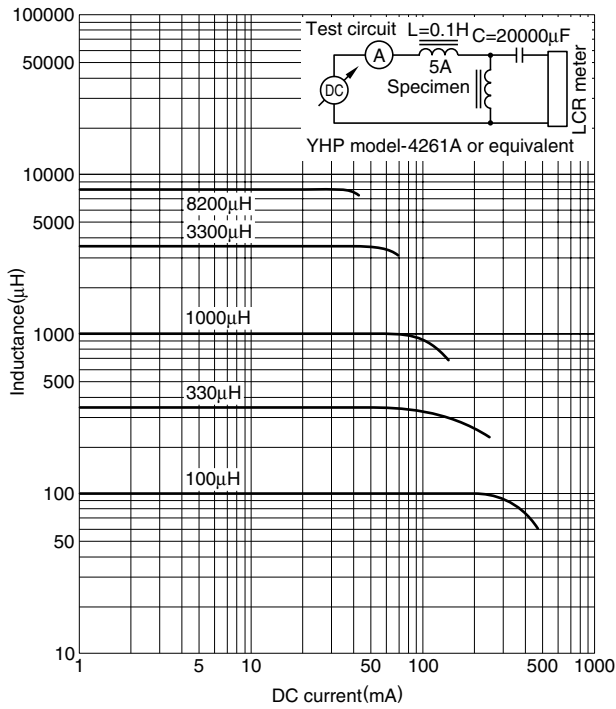
Inductance (μH)	Inductance tolerance	Q min.	Test frequency L, Q(MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)max.	Rated current (mA)max.	Part No.	Color code			
								1st	2nd	3rd	4th
10	±5%	20	2.52	17.0	0.19	780	EL0607□*-100J-PF	Brown	Black	Black	Gold
12	±5%	20	2.52	14.0	0.22	730	EL0607□*-120J-PF	Brown	Red	Black	Gold
15	±5%	20	2.52	12.0	0.24	650	EL0607□*-150J-PF	Brown	Green	Black	Gold
18	±5%	20	2.52	10.5	0.26	610	EL0607□*-180J-PF	Brown	Gray	Black	Gold
22	±5%	20	2.52	10.0	0.29	540	EL0607□*-220J-PF	Red	Red	Black	Gold
27	±5%	20	2.52	9.5	0.32	480	EL0607□*-270J-PF	Red	Violet	Black	Gold
33	±5%	20	2.52	8.5	0.34	440	EL0607□*-330J-PF	Orange	Orange	Black	Gold
39	±5%	20	2.52	8.0	0.42	410	EL0607□*-390J-PF	Orange	White	Black	Gold
47	±5%	20	2.52	7.0	0.47	375	EL0607□*-470J-PF	Yellow	Violet	Black	Gold
56	±5%	20	2.52	6.8	0.52	340	EL0607□*-560J-PF	Green	Blue	Black	Gold
68	±5%	15	2.52	6.5	0.58	320	EL0607□*-680J-PF	Blue	Gray	Black	Gold
82	±5%	15	2.52	6.3	0.64	285	EL0607□*-820J-PF	Gray	Red	Black	Gold
100	±5%	25	0.796	6.0	0.85	260	EL0607□*-101J-PF	Brown	Black	Brown	Gold
120	±5%	25	0.796	5.4	1.00	240	EL0607□*-121J-PF	Brown	Red	Brown	Gold
150	±5%	25	0.796	4.75	1.20	215	EL0607□*-151J-PF	Brown	Green	Brown	Gold
180	±5%	30	0.796	4.0	1.50	195	EL0607□*-181J-PF	Brown	Gray	Brown	Gold
220	±5%	30	0.796	3.85	1.65	180	EL0607□*-221J-PF	Red	Red	Brown	Gold
270	±5%	30	0.796	3.6	2.15	160	EL0607□*-271J-PF	Red	Violet	Brown	Gold
330	±5%	35	0.796	3.3	2.90	145	EL0607□*-331J-PF	Orange	Orange	Brown	Gold
390	±5%	35	0.796	3.0	3.25	135	EL0607□*-391J-PF	Orange	White	Brown	Gold
470	±5%	35	0.796	2.8	4.05	125	EL0607□*-471J-PF	Yellow	Violet	Brown	Gold
560	±5%	40	0.796	2.4	4.45	115	EL0607□*-561J-PF	Green	Blue	Brown	Gold
680	±5%	40	0.796	2.2	5.85	105	EL0607□*-681J-PF	Blue	Gray	Brown	Gold
820	±5%	40	0.796	2.0	6.60	90	EL0607□*-821J-PF	Gray	Red	Brown	Gold
1000	±5%	45	0.252	1.8	8.90	85	EL0607□*-102J-PF	Brown	Black	Red	Gold
1200	±5%	45	0.252	1.7	10.5	75	EL0607□*-122J-PF	Brown	Red	Red	Gold
1500	±5%	45	0.252	1.5	11.9	70	EL0607□*-152J-PF	Brown	Green	Red	Gold
1800	±5%	45	0.252	1.3	16.5	60	EL0607□*-182J-PF	Brown	Gray	Red	Gold
2200	±5%	45	0.252	1.2	19.0	58	EL0607□*-222J-PF	Red	Red	Red	Gold
2700	±5%	40	0.252	0.8	32.0	52	EL0607□*-272J-PF	Red	Violet	Red	Gold
3300	±5%	40	0.252	0.7	34.0	48	EL0607□*-332J-PF	Orange	Orange	Red	Gold
3900	±5%	40	0.252	0.7	38.0	45	EL0607□*-392J-PF	Orange	White	Red	Gold
4700	±5%	40	0.252	0.6	56.0	40	EL0607□*-472J-PF	Yellow	Violet	Red	Gold
5600	±5%	40	0.252	0.5	63.0	37	EL0607□*-562J-PF	Green	Blue	Red	Gold
6800	±5%	40	0.252	0.4	70.0	34	EL0607□*-682J-PF	Blue	Gray	Red	Gold
8200	±5%	40	0.252	0.4	77.0	31	EL0607□*-822J-PF	Gray	Red	Red	Gold
10000	±5%	25	0.0796	0.3	95.0	28	EL0607□*-103J-PF	Brown	Black	Orange	Gold
12000	±5%	25	0.0796	0.2	110	25	EL0607□*-123J-PF	Brown	Red	Orange	Gold
15000	±5%	20	0.0796	0.1	160	21	EL0607□*-153J-PF	Brown	Green	Orange	Gold

* □: Please specify packaging style, RA (Taping) or SKI (Bulk)

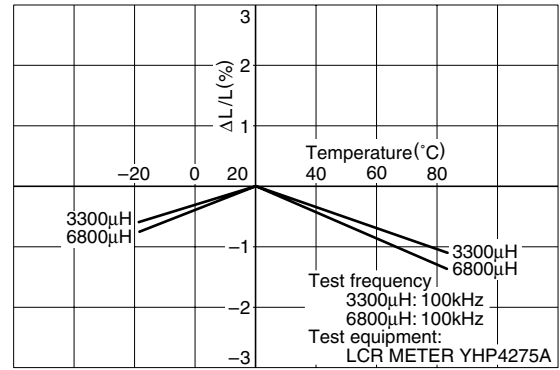
- Test equipment L, Q: HP4194A IMPEDANCE ANALYZER, or equivalent
SRF: HP8753C NETWORK ANALYZER, or equivalent
Rdc: NATIONAL VP-2941A MILLIOHM METER, or equivalent

TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



INDUCTANCE CHANGE vs. TEMPERATURE CHARACTERISTICS



Test terminal: Measuring at after the correction
Cycle: +20 $^{\circ}C \rightarrow +85^{\circ}C \rightarrow +20^{\circ}C \rightarrow -20^{\circ}C$
Temperature: Kept stabilized for 30+5, -0min each

Q vs. FREQUENCY CHARACTERISTICS

