

# Radial Lead Inductors(Coils) For Signal Line

Conformity to RoHS Directive

## EL Series EL0606

### 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.
- This product conforms to the standards that are slated to be introduced under the RoHS Directive.

### APPLICATIONS

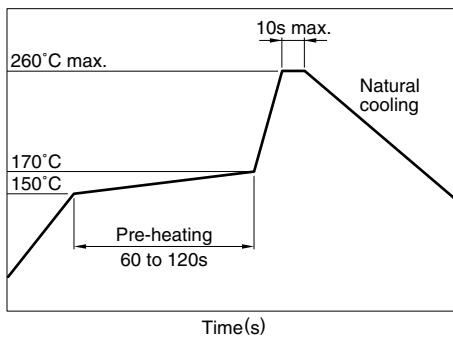
Televisions, VCRs, personal computers, and other electronic equipment.

### 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	0606	RA-	1R0	J	-	PF
(1)	(2)	(3)	(4)	(5)	(6)	

(1)Series name

(2)Dimensions

0606	6.4×6×10mm (lead pitch 5mm)
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(3)Packaging style

RA	Ammo-pack
SKI	Bulk

(4)Inductance value

R22	0.22μH
1R0	1μH
100	10μH
101	100μH

(5)Inductance tolerance

J	±5%
K	±10%

(6)Lead-free compatible product

PF	Lead-free compatible product
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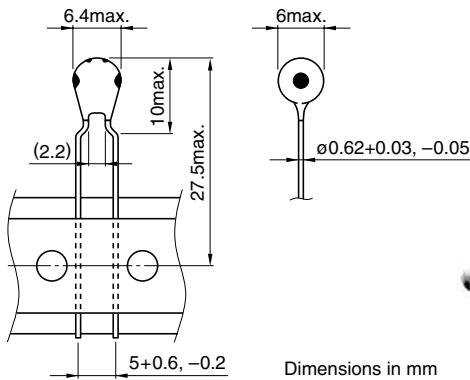
### PACKAGING STYLE AND QUANTITIES

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 ( $\mu$ H)	Inductance tolerance	Q min.	Test frequency L, Q(MHz)	Self-resonant frequency (MHz)min.	DC resistance ( $\Omega$ )max.	Rated current (mA)max.	Part No.	Color code			
								1st	2nd	3rd	4th
0.22	$\pm 10\%$	50	25.2	150	0.15	816	EL0606□*-R22K-PF	Red	Red	Silver	Silver
0.27	$\pm 10\%$	50	25.2	150	0.15	816	EL0606□-R27K-PF	Red	Violet	Silver	Silver
0.33	$\pm 10\%$	50	25.2	150	0.15	816	EL0606□-R33K-PF	Orange	Orange	Silver	Silver
0.39	$\pm 10\%$	50	25.2	130	0.15	816	EL0606□-R39K-PF	Orange	White	Silver	Silver
0.47	$\pm 10\%$	50	25.2	130	0.15	816	EL0606□-R47K-PF	Yellow	Violet	Silver	Silver
0.56	$\pm 10\%$	50	25.2	130	0.20	707	EL0606□-R56K-PF	Green	Blue	Silver	Silver
0.68	$\pm 10\%$	50	25.2	120	0.20	707	EL0606□-R68K-PF	Blue	Gray	Silver	Silver
0.82	$\pm 10\%$	50	25.2	120	0.20	707	EL0606□-R82K-PF	Gray	Red	Silver	Silver
1.0	$\pm 5\%$	50	7.96	100	0.20	707	EL0606□-1R0J-PF	Brown	Black	Gold	Gold
1.2	$\pm 5\%$	50	7.96	85	0.20	707	EL0606□-1R2J-PF	Brown	Red	Gold	Gold
1.5	$\pm 5\%$	50	7.96	70	0.22	674	EL0606□-1R5J-PF	Brown	Green	Gold	Gold
1.8	$\pm 5\%$	50	7.96	60	0.22	674	EL0606□-1R8J-PF	Brown	Gray	Gold	Gold
2.2	$\pm 5\%$	50	7.96	55	0.25	632	EL0606□-2R2J-PF	Red	Red	Gold	Gold
2.7	$\pm 5\%$	50	7.96	50	0.27	608	EL0606□-2R7J-PF	Red	Violet	Gold	Gold
3.3	$\pm 5\%$	50	7.96	45	0.30	577	EL0606□-3R3J-PF	Orange	Orange	Gold	Gold
3.9	$\pm 5\%$	50	7.96	40	0.32	559	EL0606□-3R9J-PF	Orange	White	Gold	Gold
4.7	$\pm 5\%$	50	7.96	35	0.35	534	EL0606□-4R7J-PF	Yellow	Violet	Gold	Gold
5.6	$\pm 5\%$	50	7.96	33	0.37	519	EL0606□-5R6J-PF	Green	Blue	Gold	Gold
6.8	$\pm 5\%$	50	7.96	27	0.40	500	EL0606□-6R8J-PF	Blue	Gray	Gold	Gold
8.2	$\pm 5\%$	50	7.96	25	0.45	471	EL0606□-8R2J-PF	Gray	Red	Gold	Gold
10	$\pm 5\%$	50	2.52	20	0.80	353	EL0606□-100J-PF	Brown	Black	Black	Gold
12	$\pm 5\%$	50	2.52	18	0.90	333	EL0606□-120J-PF	Brown	Red	Black	Gold
15	$\pm 5\%$	50	2.52	17	1.00	316	EL0606□-150J-PF	Brown	Green	Black	Gold
18	$\pm 5\%$	50	2.52	15	1.20	288	EL0606□-180J-PF	Brown	Gray	Black	Gold
22	$\pm 5\%$	50	2.52	13	1.40	267	EL0606□-220J-PF	Red	Red	Black	Gold
27	$\pm 5\%$	50	2.52	11	1.70	242	EL0606□-270J-PF	Red	Violet	Black	Gold
33	$\pm 5\%$	50	2.52	10.5	2.00	223	EL0606□-330J-PF	Orange	Orange	Black	Gold
39	$\pm 5\%$	50	2.52	10.0	2.40	204	EL0606□-390J-PF	Orange	White	Black	Gold
47	$\pm 5\%$	50	2.52	9.5	2.70	192	EL0606□-470J-PF	Yellow	Violet	Black	Gold
56	$\pm 5\%$	50	2.52	9.0	2.90	185	EL0606□-560J-PF	Green	Blue	Black	Gold
68	$\pm 5\%$	50	2.52	8.5	3.10	179	EL0606□-680J-PF	Blue	Gray	Black	Gold
82	$\pm 5\%$	50	2.52	7.5	3.30	174	EL0606□-820J-PF	Gray	Red	Black	Gold

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

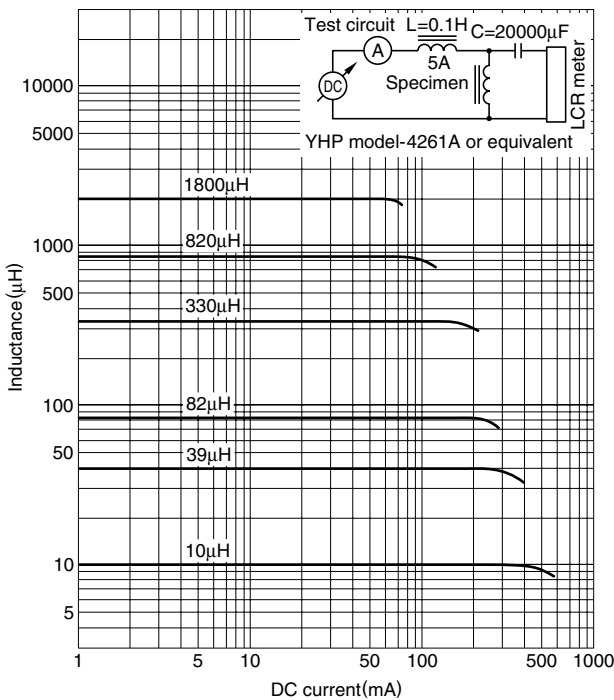
- Test equipment L, Q: HP4194A IMPEDANCE ANALYZER, or equivalent  
SRF: HP8753C NETWORK ANALYZER, or equivalent  
Rdc: NATIONAL VP-2941A MILLIOHM METER, or equivalent

### ELECTRICAL CHARACTERISTICS

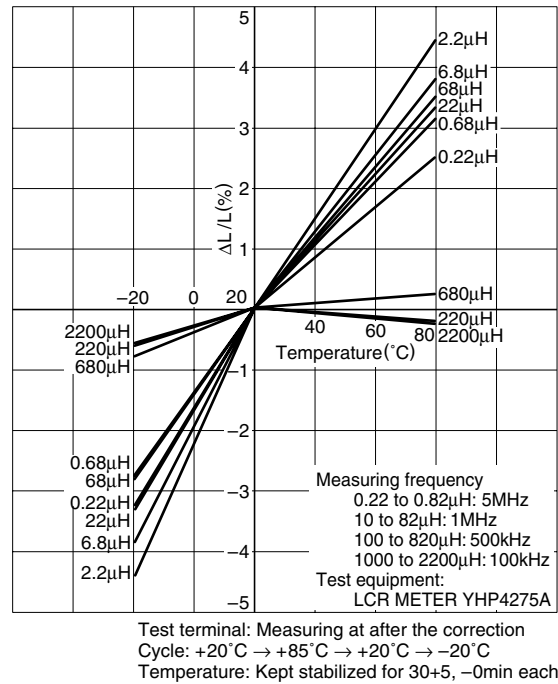
Inductance (μH)	Inductance tolerance	Q min.	Test frequency L, Q(MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)max.	Rated current (mA)max.	Part No.	Color code			
								1st	2nd	3rd	4th
100	±5%	45	0.796	6.8	3.30	174	EL0606□-101J-PF	Brown	Black	Brown	Gold
120	±5%	45	0.796	6.2	3.50	169	EL0606□-121J-PF	Brown	Red	Brown	Gold
150	±5%	45	0.796	5.7	3.70	164	EL0606□-151J-PF	Brown	Green	Brown	Gold
180	±5%	45	0.796	5.3	4.00	158	EL0606□-181J-PF	Brown	Gray	Brown	Gold
220	±5%	45	0.796	4.0	5.20	138	EL0606□-221J-PF	Red	Red	Brown	Gold
270	±5%	45	0.796	3.6	5.80	131	EL0606□-271J-PF	Red	Violet	Brown	Gold
330	±5%	45	0.796	3.3	6.50	124	EL0606□-331J-PF	Orange	Orange	Brown	Gold
390	±5%	45	0.796	3.0	7.50	115	EL0606□-391J-PF	Orange	White	Brown	Gold
470	±5%	45	0.796	2.8	8.00	111	EL0606□-471J-PF	Yellow	Violet	Brown	Gold
560	±5%	45	0.796	2.4	12.5	89	EL0606□-561J-PF	Green	Blue	Brown	Gold
680	±5%	45	0.796	2.2	14.0	84	EL0606□-681J-PF	Blue	Gray	Brown	Gold
820	±5%	45	0.796	2.0	15.5	80	EL0606□-821J-PF	Gray	Red	Brown	Gold
1000	±5%	30	0.252	1.8	18.5	73	EL0606□-102J-PF	Brown	Black	Red	Gold
1200	±5%	30	0.252	1.7	29.0	58	EL0606□-122J-PF	Brown	Red	Red	Gold
1500	±5%	30	0.252	1.5	34.0	54	EL0606□-152J-PF	Brown	Green	Red	Gold
1800	±5%	30	0.252	1.4	37.0	51	EL0606□-182J-PF	Brown	Gray	Red	Gold
2200	±5%	30	0.252	1.2	42.0	48	EL0606□-222J-PF	Red	Red	Red	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



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### TYPICAL ELECTRICAL CHARACTERISTICS

#### Q vs. FREQUENCY CHARACTERISTICS

