

# Inductors

## For General Applications Radial

## EL Series EL0909 Type

### FEATURES

- The EL series inductors are available in 6 form factors ranging from 0304 to 0909.
- With a miniature winding construction, these inductors nonetheless achieve high Q characteristics.
- Available in tape packaging to support automated mounting machines.

### 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	EL0304: 4.9N min. EL0305: 7.84N min. EL0405: 7.84N min. EL0606: 14.7N min. EL0607: 14.7N min. EL0909: 14.7N min.

### PRODUCT IDENTIFICATION

EL	0405	RA-	1R0	K	-3
(1)	(2)	(3)	(4)	(5)	(6)

(1)Series name

(2)Dimensions

0304	4×3×4mm (lead pitch 2.5mm)
0305	5×3.8×5mm (lead pitch 5mm)
0405	5.4×4.4×7mm (lead pitch 5mm)
0606	6.4×6×10mm (lead pitch 5mm)
0607	7.4×6.2×10mm (lead pitch 5mm)
0909	9.4×9×13.5mm (lead pitch 5mm)

(3)Packaging style

RA	Ammo-pack
RR	Reel

(4)Inductance value

R22	0.22μH
1R0	1μH

(5)Inductance tolerance

J	±5%
K	±10%
M	±20%

(6)TDK internal code

(Some products may not have this number. See the main body for details.)

### PACKAGING STYLE AND QUANTITIES

Packaging style	Type	Quantity
Ammo-pack	EL0304RA	3000 pieces
	EL0305RA	3000 pieces
	EL0405RA	3000 pieces
	EL0606RA	2000 pieces
	EL0607RA	2000 pieces
Taping	EL0909RR	500 pieces/reel

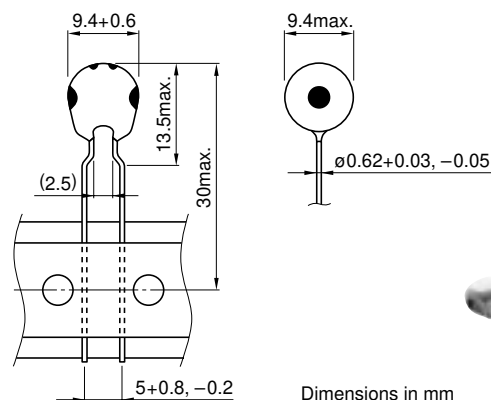
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## REEL TAPING STYLE

### SHAPES AND DIMENSIONS



Dimensions in mm

### CHARACTERISTICS

Operating temperature range	-20 to +80°C [Including self-temperature rise 20°C max.]
Withstand voltage Erms	250V
Rated current	Based on inductance change [-10% to the initial value]
Terminal tensile strength	14.7N min.
Moisture resistance	$\Delta L/L \leq \pm 5\%$ $\Delta Q/Q \leq \pm 25\%$

### 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.
100	±10, ±5%	55	796	4.3	0.85	343	EL0909RR-101X*1-2
120	±10, ±5%	55	796	4.1	0.95	324	EL0909RR-121X-2
150	±10, ±5%	55	796	3.7	1.05	309	EL0909RR-151X-2
180	±10, ±5%	55	796	3.3	1.15	295	EL0909RR-181X-2
220	±10, ±5%	50	796	2.3	1.3	277	EL0909RR-221X-2
270	±10, ±5%	50	796	2	1.5	258	EL0909RR-271X-2
330	±10, ±5%	50	796	1.95	1.7	243	EL0909RR-331X-2
390	±10, ±5%	50	796	1.85	1.85	232	EL0909RR-391X-2
470	±10, ±5%	50	796	1.57	2.3	209	EL0909RR-471X-2
560	±10, ±5%	45	796	1.5	2.55	198	EL0909RR-561X-2
680	±10, ±5%	40	796	1.4	2.85	187	EL0909RR-681X-2
820	±10, ±5%	35	796	1.32	3.1	180	EL0909RR-821X-2
1000	±10, ±5%	60	252	1.25	4.1	156	EL0909RR-102X-2
1200	±10, ±5%	60	252	1.2	4.7	146	EL0909RR-122X-2
1500	±10, ±5%	60	252	1	5.8	131	EL0909RR-152X-2
1800	±10, ±5%	60	252	0.95	7.4	116	EL0909RR-182X-2
2200	±10, ±5%	65	252	0.9	8.4	109	EL0909RR-222X-2
2700	±10, ±5%	65	252	0.84	11.2	94	EL0909RR-272X-2
3300	±10, ±5%	65	252	0.75	14.7	82	EL0909RR-332X-2
3900	±10, ±5%	65	252	0.67	19.5	72	EL0909RR-392X-2
4700	±10, ±5%	65	252	0.62	21.5	68	EL0909RR-472X-2
5600	±10, ±5%	60	252	0.57	24.5	64	EL0909RR-562X-2
6800	±10, ±5%	60	252	0.47	32.5	55	EL0909RR-682X-2
8200	±10, ±5%	55	252	0.43	38	51	EL0909RR-822X-2
10000	±10, ±5%	50	1*2/79.6*3	0.38	43	48	EL0909RR-103X-2
12000	±10, ±5%	50	1/79.6	0.37	62	40	EL0909RR-123X-2
15000	±10, ±5%	50	1/79.6	0.33	74	37	EL0909RR-153X-2
18000	±10, ±5%	50	1/79.6	0.29	103	31	EL0909RR-183X-2
22000	±10, ±5%	50	1/79.6	0.26	118	29	EL0909RR-223X-2
27000	±10, ±5%	50	1/79.6	0.25	131	28	EL0909RR-273X-2
33000	±10, ±5%	50	1/79.6	0.25	185	23	EL0909RR-333X-2
39000	±10, ±5%	40	1/79.6	0.23	205	22	EL0909RR-393X-2
47000	±10, ±5%	35	1/79.6	0.21	260	20	EL0909RR-473X-2
56000	±10, ±5%	35	1/79.6	0.2	295	18	EL0909RR-563X-2

\*1 X: Please specify inductance tolerance, K(±10%) or J(±5%)

\*2 for L

\*3 for Q

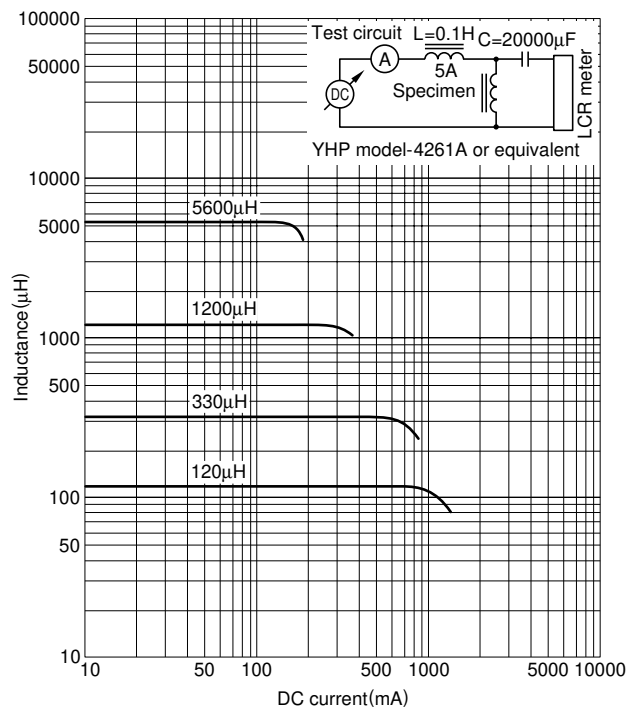
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## TYPICAL ELECTRICAL CHARACTERISTICS

### INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



### Q vs. FREQUENCY CHARACTERISTICS

