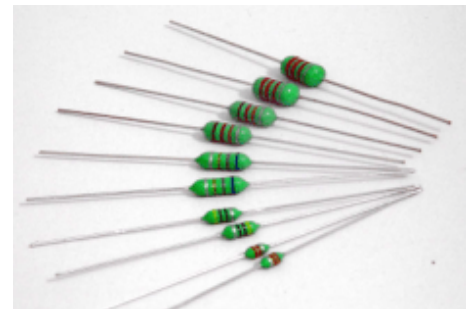


## Axial Leaded Power Inductor

### Features

- Design to be compact, small and light-weight
- Wide range of inductance
- Contribute to be high Q and self-resonant frequency
- Tapping type for automatic insertion
- Coating epoxy resin for long-life humidity resistance
- RoHS Compliant



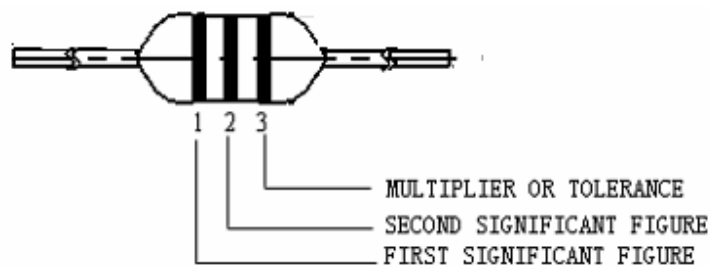
### Applications

- Electronics Products
- Communication Equipment
- Computer Devices
- TV, VCR, Radios and so on.

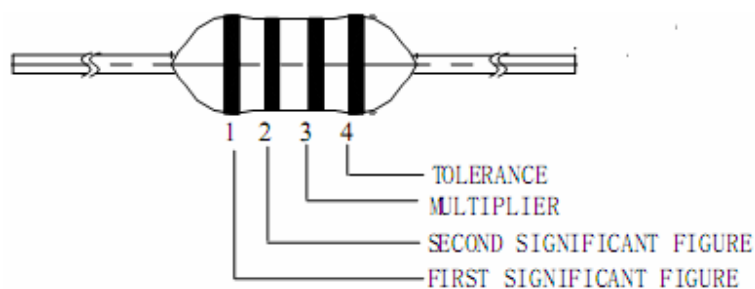


### Color Coding

#### TIA0204 Series



#### TIA0307/0410 Series



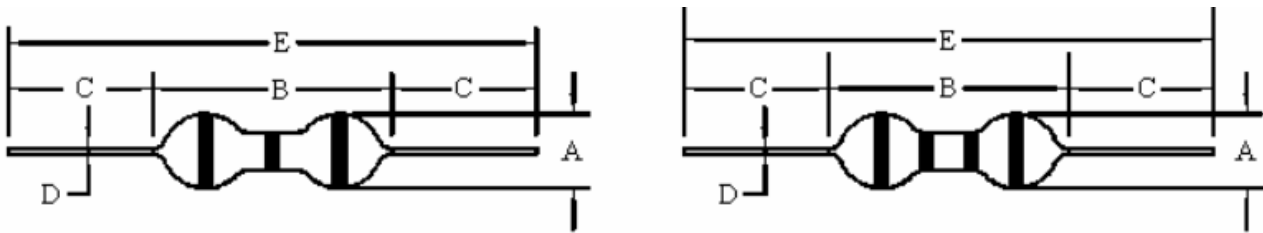
# Axial Leaded Power Inductor

## TIA0204/0307/0410 Series

Color	First Figure	Second Figure	Multiplier	Tolerance
Black	0	0	1	±20%(M)
Brown	1	1	10	-
Red	2	2	100	-
Orange	3	3	1000	-
Yellow	4	4	-	-
Green	5	5	-	-
Blue	6	6	-	-
Purple	7	7	-	-
Gray	8	8	-	-
White	9	9	-	-
Gold	-	-	0.1	±5%(J)
Silver	-	-	0.01	±10%(K)

### Lead Configurations and Dimensions

#### Straight Lead Type



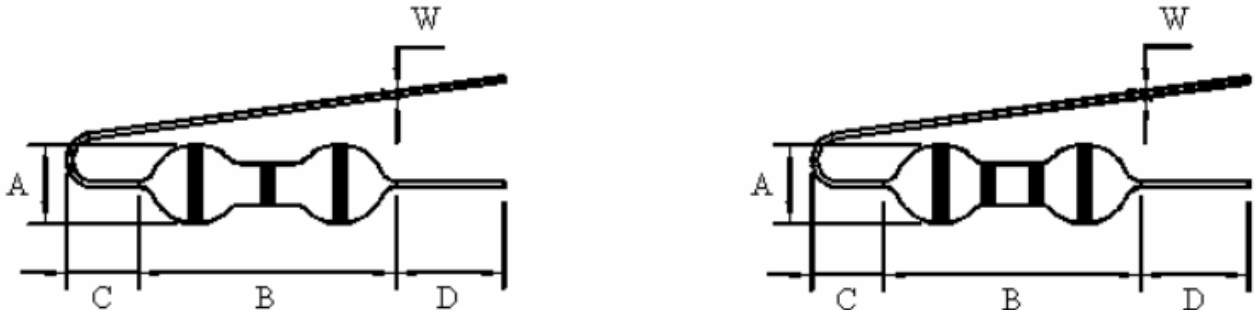
Unit: mm

Series	A max.	B max.	C±3.0	D±0.05	E±1.5
TIA0204S	2.8	5.0	29.5	0.50	62.5
TIA0307S	2.8	7.0	28.0	0.50	62.5
TIA0410S	4.0	10.0	26.0	0.65	62.5

# Axial Leaded Power Inductor

## TIA0204/0307/0410 Series

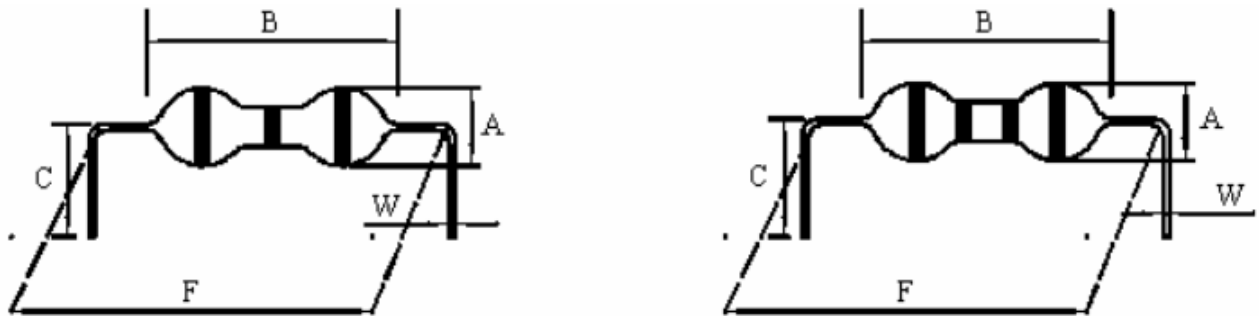
### F Forming Type



Unit: mm

Series	A max.	B max.	C max.	D min.	W±0.05
TIA0204F	2.8	5.0	6.0	3.6	0.50
TIA0307F	3.0	7.0	6.0	3.6	0.50
TIA0410F	4.0	10.0	6.0	4.0	0.65

### U Forming Type



Unit: mm

Series	A max.	B max.	C min.	F	W±0.05
TIA0204U	2.8	5.0	3.6	6 ~ 15	0.50
TIA0307U	3.0	7.0	3.6	10 ~ 20	0.50
TIA0410U	4.0	10.0	3.6	12.5 ~ 20	0.65

# Axial Leaded Power Inductor

## TIA0204/0307/0410 Series

### Electrical Characteristics

#### TIA0204 Series:

PN	Inductance (μH)	Tolerance (%)	Q Min.	Test Frequency (MHz)	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) Max.
TIA0204_R10M	0.10	±20%	35	25.2	300	0.18	700
TIA0204_R12M	0.12	±20%	35	25.2	300	0.20	660
TIA0204_R15M	0.15	±20%	35	25.2	300	0.22	620
TIA0204_R18M	0.18	±20%	35	25.2	300	0.24	600
TIA0204_R22M	0.22	±20%	35	25.2	150	0.40	400
TIA0204_R27M	0.27	±20%	35	25.2	150	0.43	380
TIA0204_R33M	0.33	±20%	35	25.2	150	0.48	370
TIA0204_R39M	0.39	±20%	35	25.2	150	0.51	350
TIA0204_R47M	0.47	±20%	35	25.2	150	0.56	330
TIA0204_R56M	0.56	±20%	35	25.2	150	0.61	320
TIA0204_R68M	0.68	±20%	35	25.2	150	0.67	310
TIA0204_R82M	0.82	±20%	35	25.2	150	0.74	290
TIA0204_1R0K	1.00	±10%	35	25.2	150	0.80	270
TIA0204_1R2K	1.20	±10%	40	7.96	110	0.90	260
TIA0204_1R5K	1.50	±10%	40	7.96	70	1.00	250
TIA0204_1R8K	1.80	±10%	40	7.96	60	1.10	240
TIA0204_2R2K	2.20	±10%	40	7.96	45	1.20	230
TIA0204_2R7K	2.70	±10%	40	7.96	40	1.30	220
TIA0204_3R3K	3.30	±10%	40	7.96	38	1.40	210
TIA0204_3R9K	3.90	±10%	40	7.96	36	1.50	200
TIA0204_4R7K	4.70	±10%	40	7.96	32	1.70	190
TIA0204_5R6K	5.60	±10%	40	7.96	30	1.90	180
TIA0204_6R8K	6.80	±10%	40	7.96	28	2.00	175
TIA0204_8R2K	8.20	±10%	40	7.96	26	2.20	165
TIA0204_100K	10	±10%	40	7.96	24	2.50	160
TIA0204_120K	12	±10%	40	2.52	22	2.50	150
TIA0204_150K	15	±10%	40	2.52	20	2.80	145
TIA0204_180K	18	±10%	40	2.52	18	3.10	140
TIA0204_220K	22	±10%	40	2.52	17	3.40	100
TIA0204_270K	27	±10%	40	2.52	16	4.300	80
TIA0204_330K	33	±10%	40	2.52	14	4.70	75

# Axial Leaded Power Inductor

## TIA0204/0307/0410 Series

PN	Inductance (μH)	Tolerance (%)	Q Min.	Test Frequency (MHz)	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) Max.
TIA0204_390K	39	±10%	40	2.52	13	5.20	74
TIA0204_470K	47	±10%	40	2.52	12	5.80	70
TIA0204_560K	56	±10%	40	2.52	11	6.40	68
TIA0204_680K	68	±10%	40	2.52	10	7.20	64
TIA0204_820K	82	±10%	40	2.52	9.5	11.00	46
TIA0204_101K	100	±10%	40	2.52	9.0	12.00	44
TIA0204_121K	120	±10%	40	0.796	8.0	13.00	42
TIA0204_151K	150	±10%	40	0.796	6.0	16.00	39
TIA0204_181K	180	±10%	40	0.796	5.0	18.00	37
TIA0204_221K	220	±10%	40	0.796	5.0	20.00	35
TIA0204_271K	270	±10%	40	0.796	4.6	25.00	25
TIA0204_331K	330	±10%	40	0.796	4.2	30.00	25
TIA0204_391K	390	±10%	40	0.796	3.8	34.00	25

### TIA0307 Series:

PN	Inductance (μH)	Tolerance (%)	Q Min.	Test Frequency (MHz)	SRF (MHz) Min.	DCR (Ω) max.	IDC (mA) Max.
TIA0307_R10M	0.10	±20%	40	25.2	480	0.06	1400
TIA0307_R12M	0.12	±20%	40	25.2	450	0.06	1350
TIA0307_R15M	0.15	±20%	40	25.2	420	0.07	1270
TIA0307_R18M	0.18	±20%	40	25.2	400	0.07	1200
TIA0307_R22M	0.22	±20%	40	25.2	380	0.08	1150
TIA0307_R27M	0.27	±20%	40	25.2	360	0.085	1110
TIA0307_R33M	0.33	±20%	40	25.2	350	0.095	1110
TIA0307_R39M	0.39	±20%	40	25.2	320	0.10	1000
TIA0307_R47M	0.47	±20%	40	25.2	300	0.11	1000
TIA0307_R56M	0.56	±20%	40	25.2	280	0.12	950
TIA0307_R68M	0.68	±20%	40	25.2	250	0.13	900
TIA0307_R82M	0.82	±20%	40	25.2	200	0.14	900
TIA0307_1R0K	1.00	±10%	40	25.2	180	0.15	815
TIA0307_1R2K	1.20	±10%	40	7.96	165	0.18	740
TIA0307_1R5K	1.50	±10%	40	7.96	150	0.20	700

# Axial Leaded Power Inductor

## TIA0204/0307/0410 Series

PN	Inductance (μH)	Tolerance (%)	Q Min.	Test Frequency (MHz)	SRF (MHz) Min.	DCR (Ω) max.	IDC (mA) Max.
TIA0307_1R8K	1.80	±10%	50	7.96	125	0.23	655
TIA0307_2R2K	2.20	±10%	50	7.96	110	0.25	630
TIA0307_2R7K	2.70	±10%	50	7.96	95	0.28	595
TIA0307_3R3K	3.30	±10%	50	7.96	70	0.30	575
TIA0307_3R9K	3.90	±10%	50	7.96	65	0.32	555
TIA0307_4R7K	4.70	±10%	50	7.96	50	0.35	530
TIA0307_5R6K	5.60	±10%	50	7.96	40	0.40	500
TIA0307_6R8K	6.80	±10%	50	7.96	30	0.45	470
TIA0307_8R2K	8.20	±10%	50	7.96	28	0.56	425
TIA0307_100K	10	±10%	50	7.96	22	0.75	370
TIA0307_120K	12	±10%	50	2.52	20	0.80	350
TIA0307_150K	15	±10%	50	2.52	16	0.93	335
TIA0307_180K	18	±10%	50	2.52	15	1.00	315
TIA0307_220K	22	±10%	50	2.52	13	1.20	285
TIA0307_270K	27	±10%	50	2.52	11	1.80	270
TIA0307_330K	33	±10%	50	2.52	10	2.10	255
TIA0307_390K	39	±10%	50	2.52	9.5	2.30	240
TIA0307_470K	47	±10%	50	2.52	8.5	2.60	205
TIA0307_560K	56	±10%	50	2.52	7.5	2.90	195
TIA0307_680K	68	±10%	50	2.52	6.5	3.30	185
TIA0307_820K	82	±10%	50	2.52	6.0	3.80	175
TIA0307_101K	100	±10%	60	2.52	5.5	4.20	165
TIA0307_121K	120	±10%	60	0.796	5.4	4.70	160
TIA0307_151K	150	±10%	60	0.796	4.7	5.40	150
TIA0307_181K	180	±10%	60	0.796	4.3	6.00	140
TIA0307_221K	220	±10%	60	0.796	4.0	7.00	130
TIA0307_271K	270	±10%	60	0.796	3.7	7.70	120
TIA0307_331K	330	±10%	60	0.796	3.4	11.10	100
TIA0307_391K	390	±10%	60	0.796	2.8	12.60	95
TIA0307_471K	470	±10%	60	0.796	2.5	14.00	90
TIA0307_561K	560	±10%	60	0.796	2.3	15.50	85
TIA0307_681K	680	±10%	60	0.796	2.0	25.30	75
TIA0307_821K	820	±10%	60	0.796	1.5	27.50	65

# Axial Leaded Power Inductor

## TIA0204/0307/0410 Series

PN	Inductance (μH)	Tolerance (%)	Q Min.	Test Frequency (MHz)	SRF (MHz) Min.	DCR (Ω) max.	IDC (mA) Max.
TIA0307_102K	1000	±10%	50	0.796	1.2	31.40	60

### TIA0410 Series:

PN	Inductance (μH)	Tolerance (%)	Q Min.	Test Frequency (MHz)	SRF (MHz) Min.	DCR (Ω) max.	IDC (mA) Max.
TIA0410_R10M	0.10	±20%	25	25.2	480	0.06	1700
TIA0410_R12M	0.12	±20%	25	25.2	450	0.06	1640
TIA0410_R15M	0.15	±20%	25	25.2	420	0.07	1560
TIA0410_R18M	0.18	±20%	25	25.2	400	0.07	1480
TIA0410_R22M	0.22	±20%	25	25.2	380	0.08	1400
TIA0410_R27M	0.27	±20%	25	25.2	340	0.09	1320
TIA0410_R33M	0.33	±20%	25	25.2	300	0.10	1280
TIA0410_R39M	0.39	±20%	25	25.2	280	0.12	1200
TIA0410_R47M	0.47	±20%	25	25.2	250	0.13	1150
TIA0410_R56M	0.56	±20%	25	25.2	230	0.14	1100
TIA0410_R68M	0.68	±20%	25	25.2	210	0.15	1030
TIA0410_R82M	0.82	±20%	45	25.2	172	0.16	980
TIA0410_1R0K	1.00	±10%	45	25.2	157	0.17	920
TIA0410_1R2K	1.20	±10%	50	7.96	144	0.18	880
TIA0410_1R5K	1.50	±10%	50	7.96	131	0.2	830
TIA0410_1R8K	1.80	±10%	55	7.96	121	0.22	790
TIA0410_2R2K	2.20	±10%	55	7.96	110	0.24	750
TIA0410_2R7K	2.70	±10%	60	7.96	100	0.25	720
TIA0410_3R3K	3.30	±10%	65	7.96	94	0.30	670
TIA0410_3R9K	3.90	±10%	65	7.96	86	0.35	640
TIA0410_4R7K	4.70	±10%	70	7.96	80	0.40	620
TIA0410_5R6K	5.60	±10%	70	7.96	74	0.45	590
TIA0410_6R8K	6.80	±10%	75	7.96	68	0.50	550
TIA0410_8R2K	8.20	±10%	80	7.96	53	0.60	530
TIA0410_100K	10	±10%	80	7.96	45	0.65	500
TIA0410_120K	12	±10%	75	2.52	34	0.70	480
TIA0410_150K	15	±10%	70	2.52	20	0.75	460

# Axial Leaded Power Inductor

## TIA0204/0307/0410 Series

PN	Inductance ( $\mu$ H)	Tolerance (%)	Q Min.	Test Frequency (MHz)	SRF (MHz) Min.	DCR ( $\Omega$ ) max.	IDC (mA) Max.
TIA0410_180K	18	$\pm 10\%$	65	2.52	14	0.80	430
TIA0410_220K	22	$\pm 10\%$	50	2.52	9.9	0.90	410
TIA0410_270K	27	$\pm 10\%$	55	2.52	7.6	1.00	390
TIA0410_330K	33	$\pm 10\%$	55	2.52	6.3	1.10	370
TIA0410_390K	39	$\pm 10\%$	50	2.52	6.3	1.20	350
TIA0410_470K	47	$\pm 10\%$	45	2.52	6.3	1.30	340
TIA0410_560K	56	$\pm 10\%$	40	2.52	6.2	1.50	320
TIA0410_680K	68	$\pm 10\%$	40	2.52	5.7	1.80	305
TIA0410_820K	82	$\pm 10\%$	35	2.52	5.3	2.00	290
TIA0410_101K	100	$\pm 10\%$	30	2.52	4.8	2.50	275
TIA0410_121K	120	$\pm 10\%$	70	0.796	3.8	3.00	185
TIA0410_151K	150	$\pm 10\%$	70	0.796	3.5	4.20	175
TIA0410_181K	180	$\pm 10\%$	70	0.796	3.3	4.60	165
TIA0410_221K	220	$\pm 10\%$	70	0.796	3.0	5.10	155
TIA0410_271K	270	$\pm 10\%$	65	0.796	2.8	6.00	145
TIA0410_331K	330	$\pm 10\%$	65	0.796	2.6	6.50	137
TIA0410_391K	390	$\pm 10\%$	65	0.796	2.4	7.50	133
TIA0410_471K	470	$\pm 10\%$	60	0.796	2.2	8.50	126
TIA0410_561K	560	$\pm 10\%$	60	0.796	2.1	9.50	120
TIA0410_681K	680	$\pm 10\%$	55	0.796	1.9	12.00	113
TIA0410_821K	820	$\pm 10\%$	55	0.796	1.8	14.00	105
TIA0410_102K	1000	$\pm 10\%$	50	0.796	1.4	20.00	85

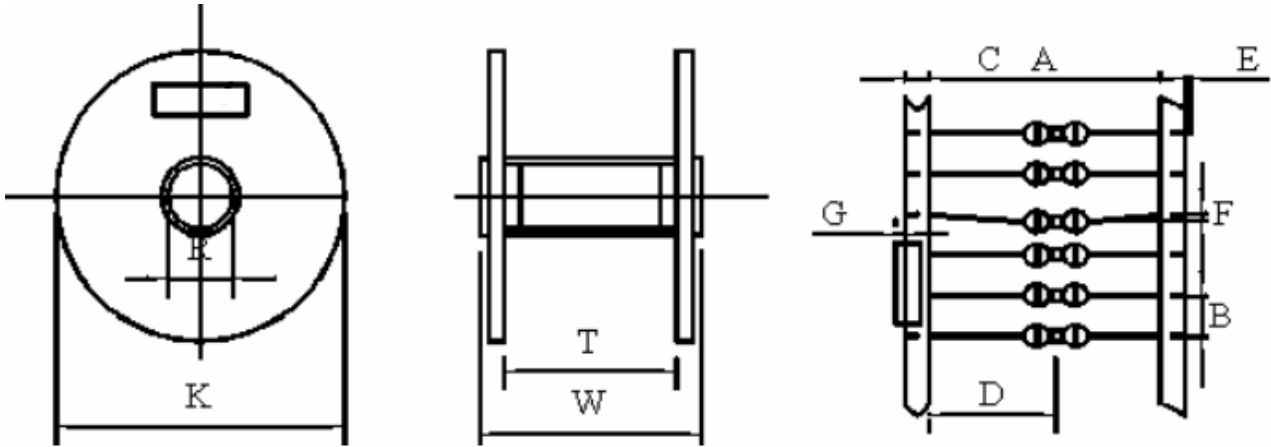


# Axial Leaded Power Inductor

## TIA0204/0307/0410 Series

### Packing

Tape and Reel Specifications:



Item	A	B	C	D	E	F
Dimension	52±1.5	5±0.5	6±1.0	26±0.05	0.50 max	1.0 max
Item	G	K	R	T	W	-
Dimension	1.0 max	355±0.5	15±0.5	71±0.5	76±0.5	-

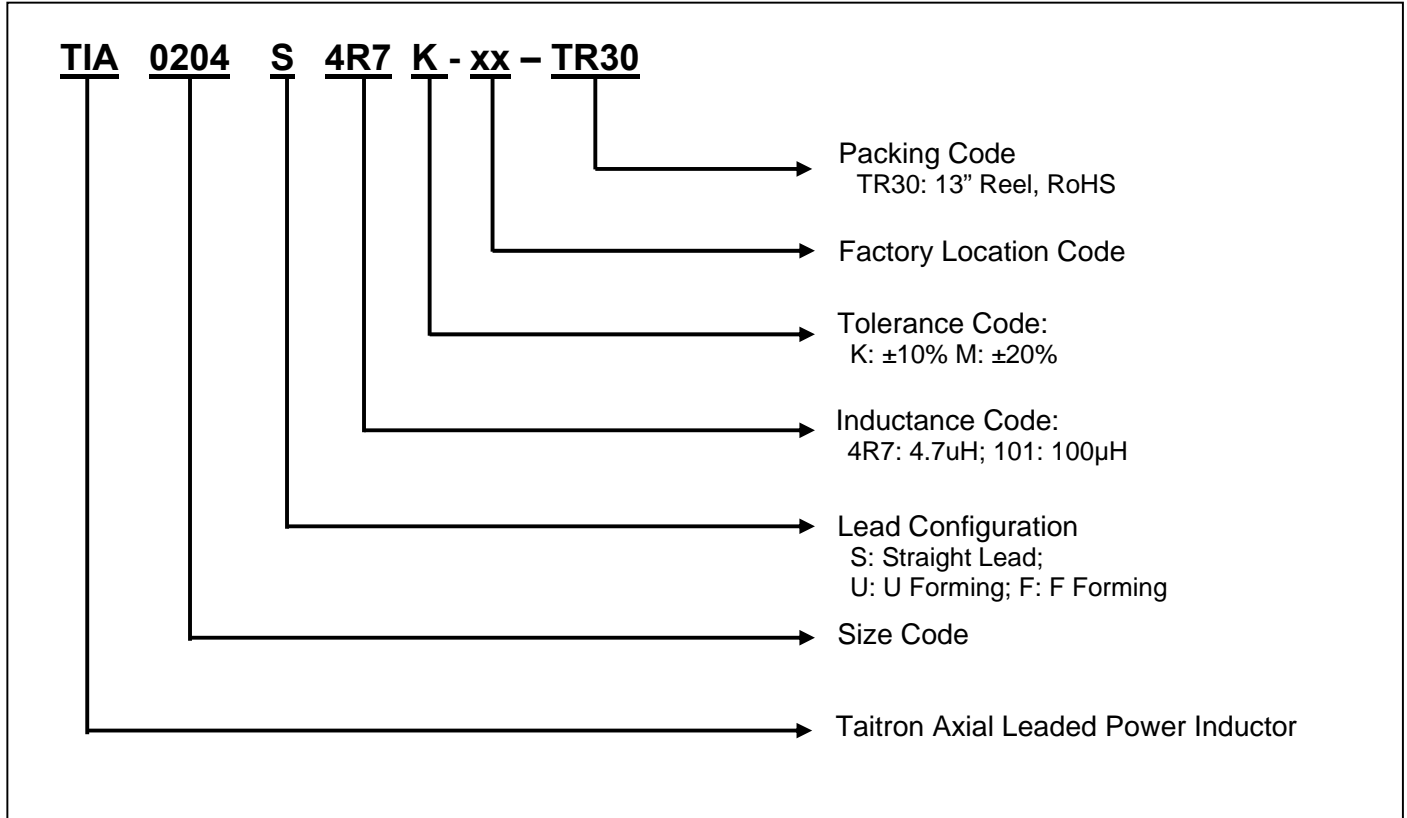
### Tape and Reel Packing Quantity:

Series	Qty/Reel	Qty/Carton	Carton Size	GW/Carton
TIA0204	5K	25K	397x397x479mm	8.0Kg
TIA0307	5K	25K	397x397x479mm	9.0Kg
TIA0410	5K	25K	397x397x479mm	11.0Kg

# Axial Leaded Power Inductor

## TIA0204/0307/0410 Series

### How to Order



# Axial Leaded Power Inductor

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## TIA0204/0307/0410 Series

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