

# SUNLEI TECHNOLOGY CORP.

## Leaded RF Chokes-AL-Series

AL series For General Use

### Features

High-performance ferrite cores that are designed to AL TYPE, "resin-coated, small choke coil" which allow to be inductance values: "up to 1000 uH".



### Applications

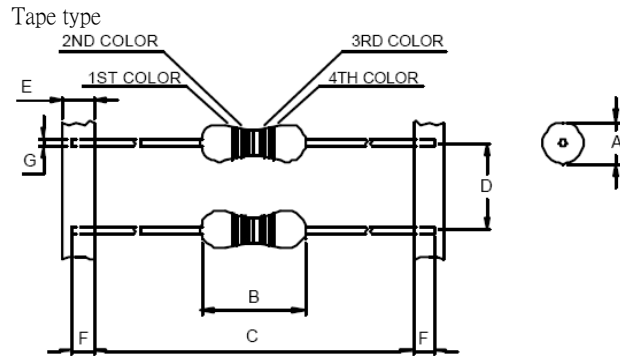
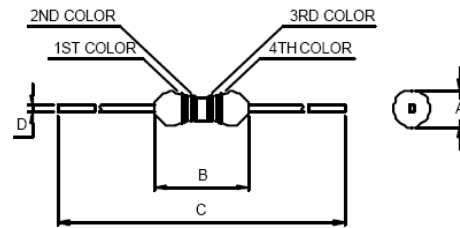
Produ Pagers, Cordless phone, High Freq. Communicationcts, Peripheral. High reliability. GPS(Global Positioning System), Televisions, Computer

### Shapes and Dimensions (mm)

### Product Identification

AL 0512- 100K - PF

AL: SERIES NAME  
 0512: DIMENSION SIZE CODE  
 100: INDUCTANCE CODE.  
 K: TOLERANCE, J=5% K=10% M=20%.  
 PF: Pb-Free



SERIES	A	B	C	D
AL0204	2.3MAX	4.0MAX	62.0±3.0	0.5
AL0307	3.0MAX	7.0MAX	62.0±3.0	0.5
AL0410	4.0MAX	10.0MAX	62.0±3.0	0.5
AL0510	5.0MAX	11.0MAX	62.0±3.0	0.65

Tape type

SERIES	A	B	C	D	D	D	D
AL0204	2.3MAX	4.0MAX	52.4±1.5	5.0±0.5	6.0±1.0	3.2	0.5
AL0307	3.0MAX	7.0MAX	52.4±1.5	5.0±0.5	6.0±1.0	3.2	0.5
AL0410	4.0MAX	10.0MAX	52.4±1.5	5.0±0.5	6.0±1.0	3.2	0.5
AL0510	5.0MAX	11.0MAX	52.4±1.5	5.0±0.5	6.0±1.0	3.2	0.65

# SUNLEI TECHNOLOGY CORP.

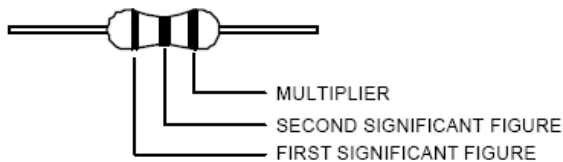
## Leaded RF Chokes-AL-Series

### Color Code Guide

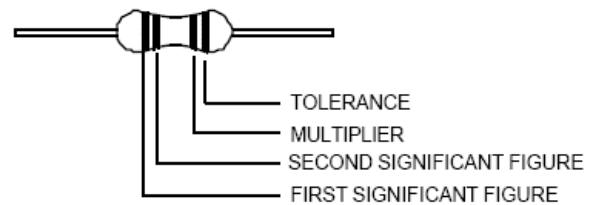
AL0307. AL0307 &AL0510 series are color band marked for identification. There are bands for these series indicating inductance value and tolerance. For values below 0.1 $\mu$ H, Gold indicates the decimal point while the next 3 bands show inductance value. There is no tolerance marked for values below 0.1 $\mu$ H.

The AL0204 series due to its size is only marked with 3 bands indicating inductance value with no decimal point and tolerance marked.

AL0204 Series



AL0307/ 0410/ 0510 Series



The Nominal Inductance is Marked.  
By A Color Code As Listed In Table Below

Color	Nominal Inductance ( $\mu$ H)			
	First Figure	Second Figure	Magnification/*	Tolerance
Black	0		1	$\pm 20\%$
Brown	1		10	-
Red	2		100	-
Orange	3		1000	-
Yellow	4		-	-
Green	5		-	-
Blue	6		-	-
Purple	7		-	-
Gray	8		-	-
White	9		-	-
Gold	-		0.1	$\pm 5\%$
Silver	-		0.01	$\pm 10\%$

- L.Q: HP4285+HP42851A
- SRF: HP4287ASRF
- RDC: CHEN HWA502BC
- IDC: CHEN HWA CH1061+301A
- Tolerance: J =  $\pm 5\%$ , K =  $\pm 10\%$ , M =  $\pm 20\%$

## Electrical Characteristics

Part Number	Inductance ( $\mu$ H)	Test Frequency (MHz)	Q Min.	Standard Specification		
				S.R.F Min (MHz)	DC R Max.( $\Omega$ )	IDC Max (mA)
AL0204-R47M-PF	0.47	25.20	35	150	0.56	330
AL0204-R56M-PF	0.56	25.20	35	150	0.61	320
AL0204-R68M-PF	0.68	25.20	35	150	0.67	310
AL0204-R82M-PF	0.82	25.20	35	150	0.74	290
AL0204-1R0K-PF	1	25.20	35	120	0.8	270
AL0204-1R2K-PF	1.2	7.96	40	110	0.9	260
AL0204-1R5K-PF	1.5	7.96	40	80	1	250
AL0204-1R8K-PF	1.8	7.96	40	60	1.1	240
AL0204-2R2K-PF	2.2	7.96	40	45	1.2	230
AL0204-2R7K-PF	2.7	7.96	40	40	1.3	220
AL0204-3R3K-PF	3.3	7.96	40	38	1.4	210
AL0204-3R9K-PF	3.9	7.96	40	35	1.6	200
AL0204-4R7K-PF	4.7	7.96	40	32	1.7	190
AL0204-5R6K-PF	5.6	7.96	40	30	1.9	180
AL0204-6R8K-PF	6.8	7.96	40	28	2	175
AL0204-8R2K-PF	8.2	7.96	40	26	2.2	165
AL0204-100K-PF	10	7.96	40	24	2.5	160
AL0204-120K-PF	12	2.52	40	22	2.5	150
AL0204-150K-PF	15	2.52	40	20	2.8	145
AL0204-180K-PF	18	2.52	40	18	3.1	140
AL0204-220K-PF	22	2.52	40	17	3.4	130
AL0204-270K-PF	27	2.52	40	16	4.3	80
AL0204-330K-PF	33	2.52	40	14	4.7	76
AL0204-390K-PF	39	2.52	40	13	5.2	74
AL0204-470K-PF	47	2.52	40	12	5.8	70
AL0204-560K-PF	56	2.52	40	11	6.4	68
AL0204-680K-PF	68	2.52	40	10	7.2	64
AL0204-820K-PF	82	2.52	40	9.5	11	46
AL0204-101K-PF	100	2.52	40	9	12	44
AL0204-121K-PF	120	0.796	40	8	13	42
AL0204-151K-PF	150	0.796	40	6	16	39
AL0204-181K-PF	180	0.796	40	5.5	18	37
AL0204-221K-PF	220	0.796	40	5	20	35

Note:

- (1). All test data is referenced to 25°C ambient.
- (2). Operating Temperature Range-25°C to +105°C.
- (3). Inductance tested at 0.25Vrms,0.0adc.
- (4). □Tolerance of inductance $\pm$ 10%(K)  $\pm$ 20%(M)
- (5). Inductance drop<10%.At Rated DC Current.
- (6). Special inquiries besides the above comon used types can be met on your requirement

## Electrical Characteristics

Part Number	Inductance ( $\mu$ H)	Test Frequency (MHz)	Q Min.	Standard Specification		
				S.R.F Min (MHz)	DC R Max.( $\Omega$ )	IDC Max (mA)
AL0307-R22M-PF	0.22	25.20	45	150	0.2	400
AL0307-R27M-PF	0.27	25.20	45	150	0.22	380
AL0307-R33M-PF	0.33	25.20	45	150	0.24	370
AL0307-R39M-PF	0.39	25.20	50	150	0.26	350
AL0307-R47M-PF	0.47	25.20	45	150	0.28	330
AL0307-R56M-PF	0.56	25.20	50	150	0.31	320
AL0307-R68M-PF	0.68	25.20	50	150	0.34	310
AL0307-R82M-PF	0.82	25.20	55	150	0.37	290
AL0307-1R0K-PF	1	2.52	60	150	0.4	270
AL0307-1R2K-PF	1.2	7.96	40	165	0.18	740
AL0307-1R5K-PF	1.5	7.96	45	150	0.2	700
AL0307-1R8K-PF	1.8	7.96	50	125	0.23	655
AL0307-2R2K-PF	2.2	7.96	50	110	0.25	630
AL0307-2R7K-PF	2.7	7.96	50	95	0.28	595
AL0307-3R3K-PF	3.3	7.96	50	70	0.3	575
AL0307-3R9K-PF	3.9	7.96	45	65	0.32	555
AL0307-4R7K-PF	4.7	7.96	45	50	0.35	530
AL0307-5R6K-PF	5.6	7.96	45	40	0.4	500
AL0307-6R8K-PF	6.8	7.96	40	30	0.45	470
AL0307-8R2K-PF	8.2	7.96	40	28	0.55	425
AL0307-100K-PF	10	7.96	40	22	0.72	370
AL0307-120K-PF	12	2.52	45	20	0.8	350
AL0307-150K-PF	15	2.52	50	16	0.88	335
AL0307-180K-PF	18	2.52	50	15	1	315
AL0307-220K-PF	22	2.52	50	13	1.2	285
AL0307-270K-PF	27	2.52	50	11	1.35	270
AL0307-330K-PF	33	2.52	50	10	1.5	255
AL0307-390K-PF	39	2.52	50	9.5	1.7	240
AL0307-470K-PF	47	2.52	60	8.5	2.3	205
AL0307-560K-PF	56	2.52	60	7.5	2.6	195
AL0307-680K-PF	68	2.52	60	6.5	2.9	185
AL0307-820K-PF	82	2.52	60	6.0	3.2	175
AL0307-101K-PF	100	2.52	60	5.5	3.5	165
AL0307-121K-PF	120	0.796	60	5.4	3.8	160
AL0307-151K-PF	150	0.796	60	4.75	4.4	150
AL0307-181K-PF	180	0.796	60	4.35	5	140
AL0307-221K-PF	220	0.796	60	4.00	5.7	130
AL0307-271K-PF	270	0.796	60	3.70	6.5	120
AL0307-331K-PF	330	0.796	60	3.40	9.5	100
AL0307-391K-PF	390	0.796	60	2.80	10.5	95
AL0307-471K-PF	470	0.796	60	2.55	11.6	90
AL0307-561K-PF	560	0.796	60	2.35	13	85
AL0307-681K-PF	680	0.796	60	2.00	18	75
AL0307-821K-PF	820	0.796	60	1.50	23	65
AL0307-102K-PF	1000	0.796	60	1.20	26	60

Note:

- (1). All test data is referenced to 25°C ambient.
- (2). Operating Temperature Range-25°C to +105°C.
- (3). Inductance tested at 0.25Vrms,0.0adc.
- (4). □Tolerance of inductance±10%(K) ±20%(M)
- (5). Inductance drop<10%.At Rated DC Current.
- (6). Special inquiries besides the above comon used types can be met on your requirement

## Electrical Characteristics

Part Number	Inductance ( $\mu$ H)	Test Frequency (MHz)	Q Min.	Standard Specification		
				S.R.F Min (MHz)	DC R Max.( $\Omega$ )	IDC Max (mA)
AL0410-R22M-PF	0.22	25.20	25	380	0.21	880
AL0410-R27M-PF	0.27	25.20	25	340	0.24	800
AL0410-R33M-PF	0.33	25.20	25	300	0.28	750
AL0410-R39M-PF	0.39	25.20	25	280	0.32	680
AL0410-R47M-PF	0.47	25.20	25	250	0.36	650
AL0410-R56M-PF	0.56	25.20	25	230	0.41	600
AL0410-R68M-PF	0.68	25.20	25	210	0.47	550
AL0410-R82M-PF	0.82	25.20	45	172	0.17	980
AL0410-1R0K-PF	1	25.20	45	157	0.19	920
AL0410-1R2K-PF	1.2	7.96	50	144	0.21	880
AL0410-1R5K-PF	1.5	7.96	50	131	0.23	830
AL0410-1R8K-PF	1.8	7.96	55	121	0.25	790
AL0410-2R2K-PF	2.2	7.96	55	110	0.28	750
AL0410-2R7K-PF	2.7	7.96	60	100	0.3	720
AL0410-3R3K-PF	3.3	7.96	65	94	0.34	670
AL0410-3R9K-PF	3.9	7.96	65	86	0.37	640
AL0410-4R7K-PF	4.7	7.96	70	80	0.39	620
AL0410-5R6K-PF	5.6	7.96	70	74	0.43	590
AL0410-6R8K-PF	6.8	7.96	75	68	0.48	550
AL0410-8R2K-PF	8.2	7.96	80	53	0.52	530
AL0410-100K-PF	10	7.96	85	45	0.58	500
AL0410-120K-PF	12	2.52	75	34	0.63	480
AL0410-150K-PF	15	2.52	70	20	0.72	460
AL0410-180K-PF	18	2.52	65	14	0.77	430
AL0410-220K-PF	22	2.52	60	9.9	0.84	410
AL0410-270K-PF	27	2.52	55	7.6	0.94	390
AL0410-330K-PF	33	2.52	55	6.3	1.03	370
AL0410-390K-PF	39	2.52	50	6.3	1.12	350
AL0410-470K-PF	47	2.52	45	6.3	1.22	340
AL0410-560K-PF	56	2.52	40	6.2	1.34	320
AL0410-680K-PF	68	2.52	40	3.7	1.47	305
AL0410-820K-PF	82	2.52	35	5.3	1.62	290
AL0410-101K-PF	100	2.52	30	4.8	1.8	275
AL0410-121K-PF	120	0.796	70	3.8	3.7	185
AL0410-151K-PF	150	0.796	70	3.5	4.2	175
AL0410-181K-PF	180	0.796	70	3.3	4.6	165
AL0410-221K-PF	220	0.796	70	3.00	5.1	155
AL0410-271K-PF	270	0.796	65	2.80	5.8	145
AL0410-331K-PF	330	0.796	65	2.60	6.4	137
AL0410-391K-PF	390	0.796	65	2.40	7	133
AL0410-471K-PF	470	0.796	60	2.25	7.7	126
AL0410-561K-PF	560	0.796	60	2.10	8.5	120
AL0410-681K-PF	680	0.796	55	1.95	9.4	113
AL0410-821K-PF	820	0.796	55	1.85	10.5	105
AL0410-102K-PF	1000	0.796	50	1.40	14	100

Note:

- (1). All test data is referenced to 25°C ambient.
- (2). Operating Temperature Range-25°C to +105°C.
- (3). Inductance tested at 0.25Vrms,0.0adc.
- (4). □Tolerance of inductance $\pm$ 10%(K)  $\pm$ 20%(M)
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## Leaded RF Chokes-AL-Series

### Electrical Characteristics

Part Number	Inductance ( $\mu$ H)	Test Frequency (MHz)	Q Min.	Standard Specification		
				S.R.F Min (MHz)	DC R Max.( $\Omega$ )	IDC Max (mA)
AL0510-471K-PF	470	0.796	60	1.9	4.7	126
AL0510-561K-PF	560	0.796	50	1.8	5.5	120
AL0510-681K-PF	680	0.796	55	1.5	6.2	113
AL0510-821K-PF	820	0.796	45	1.2	7	105
AL0510-102K-PF	1000	0.252	40	1	8	100
AL0510-122K-PF	1200	0.252	40	0.95	9	95
AL0510-152K-PF	1500	0.252	40	0.9	10	90
AL0510-182K-PF	1800	0.252	40	0.85	11	85
AL0510-222K-PF	2200	0.252	40	0.8	14	80
AL0510-272K-PF	2700	0.252	40	0.75	18	75
AL0510-332K-PF	3300	0.252	40	0.7	22	62
AL0510-392K-PF	3900	0.252	40	0.65	26	59
AL0510-472K-PF	4700	0.252	40	0.6	30	55
AL0510-562K-PF	5600	0.252	30	0.5	34	40
AL0510-682K-PF	6800	0.252	30	0.45	48	35
AL0510-822K-PF	8200	0.252	30	0.4	62	30
AL0510-103K-PF	10000	0.252	20	0.35	74	25

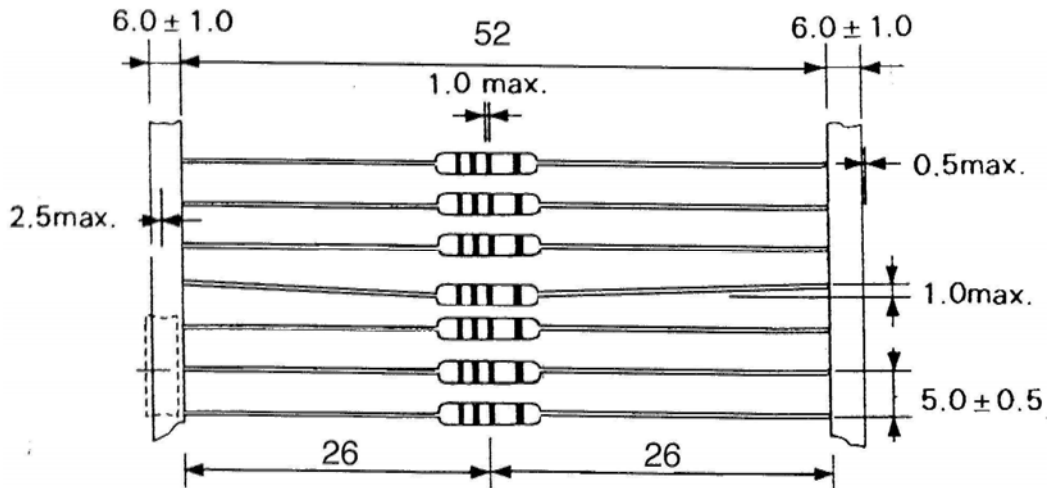
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- (4). Tolerance of inductance $\pm$ 10%(K)  $\pm$ 20%(M)
- (5). Inductance drop<10%.At Rated DC Current.
- (6). Special inquiries besides the above common used types can be met on your requirement

# Leaded RF Chokes-AL-Series

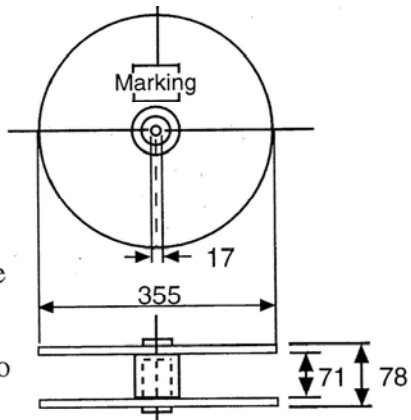
## PACKAGING

### Tape Dimensions (mm)

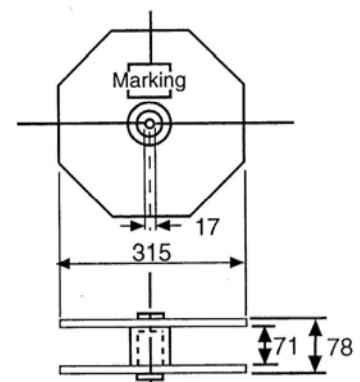


### Marking

1. Product name
2. Quantity
3. Inspection No



**Beginning of tape winding**



**End of winding**

### DIMENSIONS AND PACKAGING QUANTITIES

SERIES	TYPE	PACKAGING QUANTITY		BOX SIZE			CARTON SIZE(mm)			GROSS
		PARTS/REEL	PARTS/CARION	L1	W1	H1	L	W	H	WEIGHT
AL0204	T5	5000pcs	25000pcs	320	90	320	330	330	460	8.0kg
AL0307	T5	5000pcs	25000pcs	320	90	320	330	330	460	9.0kg
AL0410	T5	5000pcs	25000pcs	360	90	360	380	380	460	11.0kg
AL0510	T5	5000pcs	15000pcs	360	90	360	380	380	460	16.0kg