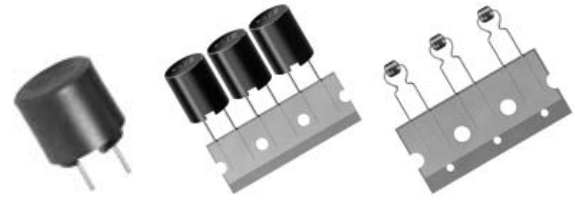


# ラジアルリード形インダクタ

## RADIAL LEADED INDUCTORS



OPERATING TEMP.	-25~+105°C (製品自己発熱含む) (Including self-generated heat)
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フロー/WAVE

### 特長 FEATURES

- ・LHL08~LHL16シリーズはケースタイプであるので、基板上での自立安定性に優れる
- ・小電流用にはLAV35/LHL06が対応
- ・大電流用にはLHLC06/LHLZ06/LHL(C)08/LHL(C)10/LHL13/LHL16が対応
- ・LHLP10/LHLP12/LHLP16は大電流用の磁気シールドタイプ
- ・LHLP10シリーズはテーピング対応可能

- ・The LHL08~LHL16 series radial inductors are encapsulated in a resin housing which adds to the stability of the mounted part on a printed circuit board.
- ・The LAV35 and LHL06 series are for small current applications.
- ・The LHLC06/LHLZ06/LHL (C)08/LHL (C)10/LHL13/LHL16 series are for high current applications.
- ・The LHLP10/LHLP12/LHLP16 series are shielded type for high current applications.
- ・LHLP10 series is also available in ammo packaging.

### 用途 APPLICATIONS

- ・一般民生(CTV,PDPTV,LCDTV,DVD等の家電)、産機用機器の電源用チョークコイル
- ・各種フィルタ用ピーキングコイル

- ・Ideal for use as a power choke coil in general household appliances (TVS,PDPTV,LCDTV,DVD,etc) and industrial equipment.
- ・Can also be used as a peaking coil in filtering applications.

### 形名表記法 ORDERING CODE

<b>1</b> 形式	<b>3</b> 外形寸法 [mm以下]	<b>4</b> 包装	<b>5</b> 公称インダクタンス[μH]	<b>6</b> インダクタンス許容差[%]
LA アキシアルリードインダクタ LH ラジアルリードインダクタ	06 L06 6.8, LC06 7.5, LZ06 7.8 08 9.0 10 11.0 12 13.0 13 14.0 16 17.0 35 6.0 (LAV)	NB 単品 (LHL) TB つづら折りテーピング (LHL) VB つづら折りテーピング (LAV)	例 1R0 1.0 150 15 102 1000 ※R=小数点	J ±5 K ±10 M ±20 N ±30
<b>2</b> 形状記号				<b>7</b> 当社管理記号
L△ テーピング対応品 LC 大電流タイプ LZ 大電流、低RDCタイプ V△ ラジアルフォーミング (LAV) LP 磁気シールドタイプ △=スペース				△△△ 標準品 △=スペース



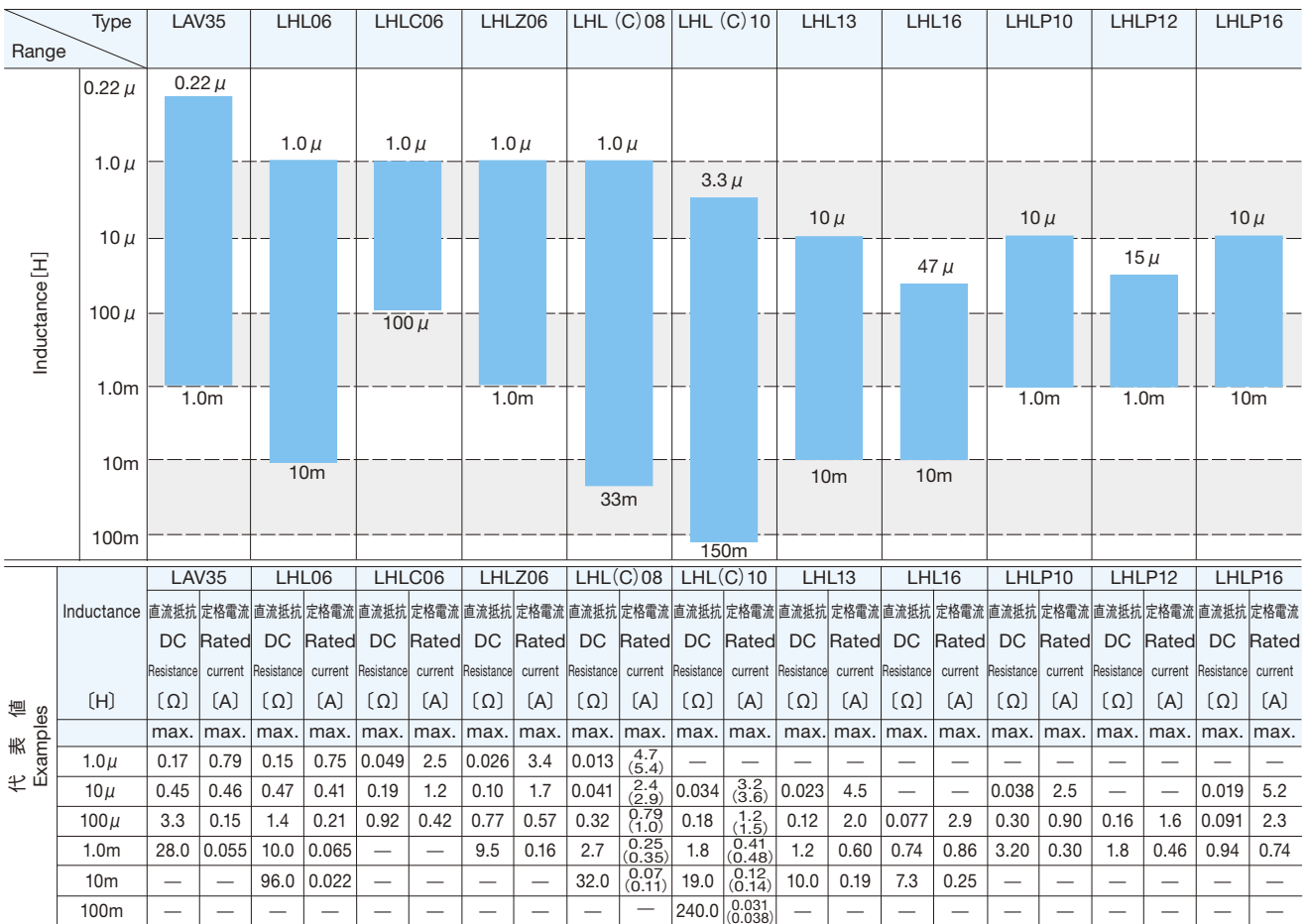
<b>1</b> Type	<b>3</b> External dimensions (mm max)	<b>4</b> Packaging Code	<b>5</b> Nominal Inductance (μH)	<b>6</b> Inductance Tolerances (%)
LA Axial leaded inductor LH Radial leaded inductor	06 L06 6.8, LC06 7.5, LZ06 7.8 08 9.0 10 11.0 12 13.0 13 14.0 16 17.0 35 6.0 (LAV)	NB Bulk (LHL) TB Ammo packaging (LHL) VB Ammo packaging (LAV)	example 1R0 1.0 150 15 102 1000 ※R=Decimal point	J ±5 K ±10 M ±20 N ±30
<b>2</b> Configuration				<b>7</b> Internal code
L△ Standard type Taping available LC High current type LZ High current, low RDC type V△ Radial formed lead (LAV) LP Shielded type Bulk △=Blank space				△△△ Standard product △=Blank space

外形寸法 EXTERNAL DIMENSIONS

Type	LAV35	LHL06	LHLC06	LHLZ06	LHL (C)08	LHL (C)10	LHL13	LHL16	LHLP10	LHLP12	LHLP16
Fig.											
D	6.0max (0.236max)	6.8max (0.268max)	7.5max (0.295max)	7.8max (0.307max)	9.0max (0.354max)	11.0max (0.433max)	14.0max (0.551max)	17.0max (0.669max)	11.0max (0.433max)	13.0max (0.512max)	17.0max (0.669max)
H <sub>2</sub>	8.0max (0.315max)	11.0max (0.433max)	11.0max (0.433max)	11.0max (0.433max)	9.5max (0.374max)	14.0max (0.551max)	17.0max (0.669max)	21.0max (0.827max)	11.0max (0.433max)	16.0max (0.624max)	19.0max (0.741max)
l	—	5.0±1.0 (0.197±0.039)	5.0±1.0 (0.197±0.039)	5.0±1.0 (0.197±0.039)	5.0±1.0 (0.197±0.039)	5.0±1.0 (0.197±0.039)	5.0±1.0 (0.197±0.039)	5.0±1.0 (0.197±0.039)	5.0±1.0 (0.197±0.039)	5.0±1.0 (0.197±0.039)	5.0±1.0 (0.197±0.039)
F	—	5.0±1.0 (0.197±0.039)	5.0±1.0 (0.197±0.039)	5.0±1.0 (0.197±0.039)	5.0±1.0 (0.197±0.039)	5.0±1.0 (0.197±0.039)	7.5±1.0 (0.295±0.039)	7.5±1.0 (0.295±0.039)	5.0±1.0 (0.197±0.039)	5.0±1.0 (0.197±0.039)	7.5±1.0 (0.295±0.039)
φd	0.5±0.05 (0.020±0.002)	0.6±0.05 (0.024±0.002)	0.6±0.05 (0.024±0.002)	0.6±0.05 (0.024±0.002)	0.6±0.05 (0.024±0.002)	0.6±0.05 (0.024±0.002)	0.8±0.05 (0.031±0.002)	0.8±0.05 (0.031±0.002)	0.6±0.05 (0.024±0.004)	0.6±0.05 (0.024±0.004)	0.8±0.05 (0.031±0.004)

Unit : mm (inch)

概略バリエーション AVAILABLE INDUCTANCE RANGE



セレクションガイド  
Selection Guide

アイテム一覧  
Part Numbers

特性図  
Electrical Characteristics

梱包  
Packaging

信頼性  
Reliability Data

使用上の注意  
Precautions



etc

LAV35

形名 Ordering code	EHS (Environmental Hazardous Substances)	公称 インダクタンス Inductance [ $\mu$ H]	インダクタンス 許容差 Inductance Tolerance [%]	Q (min.)	自己共振 周波数 Self-resonant frequency [MHz] (min.)	直流抵抗 DC Resistance [ $\Omega$ ] (max.)	定格電流 Rated current [mA] (max.)	測定 周波数 Measuring frequency [MHz]	
LAV 35VB R22M	RoHS	0.22	±20%	50	170	0.09	1000	25.2	
LAV 35VB R27M	RoHS	0.27			160	0.10	980		
LAV 35VB R33M	RoHS	0.33			140	0.11	960		
LAV 35VB R39M	RoHS	0.39			130	0.12	940		
LAV 35VB R47M	RoHS	0.47			120	0.13	910		
LAV 35VB R56M	RoHS	0.56			110	0.14	880		
LAV 35VB R68M	RoHS	0.68			100	0.15	850		
LAV 35VB R82M	RoHS	0.82			90	0.16	820		
LAV 35VB 1R0K	RoHS	1.0	±10%		82	0.17	790	7.96	
LAV 35VB 1R2K	RoHS	1.2			70	0.18	760		
LAV 35VB 1R5K	RoHS	1.5			65	0.20	730		
LAV 35VB 1R8K	RoHS	1.8			57	0.22	700		
LAV 35VB 2R2K	RoHS	2.2			47	0.24	670		
LAV 35VB 2R7K	RoHS	2.7			40	0.26	640		
LAV 35VB 3R3K	RoHS	3.3			35	0.28	610		
LAV 35VB 3R9K	RoHS	3.9			33	0.30	580		
LAV 35VB 4R7K	RoHS	4.7			31	0.33	560		
LAV 35VB 5R6K	RoHS	5.6			27	0.36	540		
LAV 35VB 6R8K	RoHS	6.8			24	0.39	520		
LAV 35VB 8R2K	RoHS	8.2			22	0.42	490		
LAV 35VB 100K	RoHS	10			21	0.45	460		
LAV 35VB 120K	RoHS	12			18	1.2	350		2.52
LAV 35VB 150K	RoHS	15			16	1.3	330		
LAV 35VB 180K	RoHS	18			14	1.4	300		
LAV 35VB 220K	RoHS	22			13	1.5	270		
LAV 35VB 270K	RoHS	27			12	1.6	250		
LAV 35VB 330K	RoHS	33			11	1.8	235		
LAV 35VB 390K	RoHS	39			10	2.0	220		
LAV 35VB 470K	RoHS	47	9.5		2.2	200			
LAV 35VB 560K	RoHS	56	9.0		2.4	190			
LAV 35VB 680K	RoHS	68	8.5		2.8	170			
LAV 35VB 820K	RoHS	82	8.0		3.0	155	0.796		
LAV 35VB 101J	RoHS	100	7.5		3.3	150			
LAV 35VB 121J	RoHS	120	6.8		4.2	140			
LAV 35VB 151J	RoHS	150	6.2		5.0	130			
LAV 35VB 181J	RoHS	180	5.6		6.0	125			
LAV 35VB 221J	RoHS	220	5.0		7.5	120			
LAV 35VB 271J	RoHS	270	4.6		11	105			
LAV 35VB 331J	RoHS	330	4.2		13	95			
LAV 35VB 391J	RoHS	390	3.8		15	90			
LAV 35VB 471J	RoHS	470	3.4		17	80			
LAV 35VB 561J	RoHS	560	3.0		19	75			
LAV 35VB 681J	RoHS	680	2.6		22	68			
LAV 35VB 821J	RoHS	820	2.2		25	60			
LAV 35VB 102J	RoHS	1000	2.0		28	55			

LHL06

形名 Ordering code	EHS (Environmental Hazardous Substances)	公称 インダクタンス Inductance [μH]	インダクタンス 許容差 Inductance Tolerance	Q (min.)	自己共振 周波数 Self-resonant frequency [MHz] (min.)	直流抵抗 DC Resistance [Ω] (max.)	定格電流 Rated current [mA] (max.)	測定 周波数 Measuring frequency [MHz]	
LH L 06 □ 1R0M	RoHS	1.0	±20%	50	87	0.15	750	7.96	
LH L 06 □ 1R2M	RoHS	1.2			78	0.16	720		
LH L 06 □ 1R5M	RoHS	1.5			76	0.17	680		
LH L 06 □ 1R8M	RoHS	1.8			70	0.18	650		
LH L 06 □ 2R2M	RoHS	2.2			57	0.20	610		
LH L 06 □ 2R7M	RoHS	2.7			47	0.25	580		
LH L 06 □ 3R3M	RoHS	3.3			40	0.26	560		
LH L 06 □ 3R9K	RoHS	3.9			35	0.27	530		
LH L 06 □ 4R7K	RoHS	4.7			32	0.30	510		
LH L 06 □ 5R6K	RoHS	5.6			25	0.34	480		
LH L 06 □ 6R8K	RoHS	6.8			23	0.38	460		
LH L 06 □ 8R2K	RoHS	8.2			22	0.39	440		
LH L 06 □ 100K	RoHS	10			18	0.47	410		2.52
LH L 06 □ 120K	RoHS	12			17	0.39	400		
LH L 06 □ 150K	RoHS	15	16		0.46	380			
LH L 06 □ 180K	RoHS	18	14		0.51	360			
LH L 06 □ 220K	RoHS	22	13		0.52	340			
LH L 06 □ 270K	RoHS	27	11		0.62	320			
LH L 06 □ 330K	RoHS	33	10		0.68	300			
LH L 06 □ 390K	RoHS	39	8.9		0.78	290			
LH L 06 □ 470K	RoHS	47	8.5		0.85	270			
LH L 06 □ 560K	RoHS	56	8.2		0.90	250			
LH L 06 □ 680K	RoHS	68	7.2		1.1	245			
LH L 06 □ 820K	RoHS	82	7.0		1.2	230			
LH L 06 □ 101K	RoHS	100	6.8		1.4	210	0.796		
LH L 06 □ 121K	RoHS	120	6.6		1.5	190			
LH L 06 □ 151K	RoHS	150	5.8		1.7	170			
LH L 06 □ 181K	RoHS	180	5.2		2.0	165			
LH L 06 □ 221K	RoHS	220	4.7		2.3	160			
LH L 06 □ 271K	RoHS	270	4.6		2.6	130			
LH L 06 □ 331K	RoHS	330	4.0		3.1	120			
LH L 06 □ 391K	RoHS	390	3.5		3.9	110			
LH L 06 □ 471K	RoHS	470	3.4		4.4	100			
LH L 06 □ 561K	RoHS	560	3.1		4.8	85			
LH L 06 □ 681K	RoHS	680	2.9	6.8	80				
LH L 06 □ 821K	RoHS	820	2.5	7.9	75				
LH L 06 □ 102J	RoHS	1000	2.4	10	65	0.252			
LH L 06 □ 122J	RoHS	1200	2.0	12	58				
LH L 06 □ 152J	RoHS	1500	1.8	17	54				
LH L 06 □ 182J	RoHS	1800	1.7	20	51				
LH L 06 □ 222J	RoHS	2200	1.6	21	49				
LH L 06 □ 272J	RoHS	2700	1.5	26	44				
LH L 06 □ 332J	RoHS	3300	1.3	34	37				
LH L 06 □ 392J	RoHS	3900	1.2	38	35				
LH L 06 □ 472J	RoHS	4700	1.1	42	33				
LH L 06 □ 562J	RoHS	5600	1.0	52	30				
LH L 06 □ 682J	RoHS	6800	0.9	74	26				
LH L 06 □ 822J	RoHS	8200	0.8	84	24				
LH L 06 □ 103J	RoHS	10000	40	0.7	96		22	0.0796	

形名の□には包装記号 (TB : テーピング, NB : 単品) が入ります。

□ Please specify the packaging code. (TB : Taping, NB : Bulk)

LHLC06

形名 Ordering code	EHS (Environmental Hazardous Substances)	公称 インダクタンス Inductance [μH]	インダクタンス 許容差 Inductance Tolerance	Q (min.)	自己共振 周波数 Self-resonant frequency [MHz] (min.)	直流抵抗 DC Resistance [Ω] (max.)	定格電流 Rated current [A] (max.)	測定 周波数 Measuring frequency [MHz]	
LH LC06 □1R0M	RoHS	1.0	± 20%	20	98	0.049	2.5	7.96	
LH LC06 □1R5M	RoHS	1.5			67	0.066	2.1		
LH LC06 □2R2M	RoHS	2.2			58	0.074	1.9		
LH LC06 □3R3M	RoHS	3.3			37	0.11	1.6		
LH LC06 □4R7K	RoHS	4.7			29	0.12	1.4		
LH LC06 □6R8K	RoHS	6.8	± 10%	30	24	0.14	1.3	2.52	
LH LC06 □100K	RoHS	10			19	0.19	1.2		
LH LC06 □120K	RoHS	12			17	0.20	1.15		
LH LC06 □150K	RoHS	15			15	0.23	1.0		
LH LC06 □180K	RoHS	18			13	0.26	0.95		
LH LC06 □220K	RoHS	22			12	0.28	0.90		
LH LC06 □270K	RoHS	27			11	0.33	0.80		
LH LC06 □330K	RoHS	33			9.4	0.37	0.73		
LH LC06 □390K	RoHS	39			9.3	0.50	0.70		
LH LC06 □470K	RoHS	47			9.2	0.57	0.63		
LH LC06 □560K	RoHS	56			8.8	0.63	0.57		
LH LC06 □680K	RoHS	68			8.2	0.70	0.53		
LH LC06 □820K	RoHS	82			7.6	0.78	0.48		
LH LC06 □101K	RoHS	100			6.9	0.92	0.42		0.796

形名の□には包装記号 (TB : テーピング, NB : 単品) が入ります。

□ Please specify the packaging code. (TB : Taping, NB : Bulk)

LHLZ06

形名 Ordering code	EHS (Environmental Hazardous Substances)	公称 インダクタンス Inductance [μH]	インダクタンス 許容差 Inductance Tolerance	Q (min.)	自己共振 周波数 Self-resonant frequency [MHz] (min.)	直流抵抗 DC Resistance [Ω] (max.)	定格電流 Rated current [A] (max.)	測定 周波数 Measuring frequency [MHz]		
LH LZ06 □1R0M	RoHS	1.0	± 20%	20	85	0.026	3.4	7.96		
LH LZ06 □1R5M	RoHS	1.5			65	0.032	3.0			
LH LZ06 □2R2M	RoHS	2.2			50	0.039	2.6			
LH LZ06 □3R3M	RoHS	3.3			35	0.047	2.3			
LH LZ06 □4R7M	RoHS	4.7			28	0.055	2.1			
LH LZ06 □6R8M	RoHS	6.8			23	0.070	1.9			
LH LZ06 □100K	RoHS	10	± 10%	30	18	0.10	1.7	2.52		
LH LZ06 □150K	RoHS	15		14	0.14	1.3				
LH LZ06 □220K	RoHS	22		20	9.5	0.19	1.2			
LH LZ06 □330K	RoHS	33			8.2	0.28	0.92			
LH LZ06 □470K	RoHS	47			7.7	0.35	0.82			
LH LZ06 □680K	RoHS	68			6.9	0.50	0.71			
LH LZ06 □101K	RoHS	100			5.6	0.77	0.57			
LH LZ06 □151K	RoHS	150		30	4.2	1.2	0.47		0.796	
LH LZ06 □221K	RoHS	220			3.8	2.0	0.36			
LH LZ06 □331K	RoHS	330			3.1	2.5	0.31			
LH LZ06 □471K	RoHS	470			2.4	3.9	0.24			
LH LZ06 □681K	RoHS	680			2.1	5.0	0.21			
LH LZ06 □102J	RoHS	1000		± 5%	50	1.6	9.5		0.16	0.252

形名の□には包装記号 (TB : テーピング, NB : 単品) が入ります。

□ Please specify the packaging code. (TB : Taping, NB : Bulk)

LHL08

形名 Ordering code	EHS (Environmental Hazardous Substances)	公称 インダクタンス Inductance [μH]	インダクタンス 許容差 Inductance Tolerance	Q (min.)	自己共振 周波数 Self-resonant frequency [MHz] (min.)	直流抵抗 DC Resistance [Ω] (max.)	定格電流 Rated current [A] (max.)	測定 周波数 Measuring frequency [MHz]	
LH L 08 □ 1R0N	RoHS	1.0	± 30%	40	76	0.013	4.7	7.96	
LH L 08 □ 1R5M	RoHS	1.5	± 20%		65	0.014	4.4		
LH L 08 □ 2R2M	RoHS	2.2			56	0.017	4.1		
LH L 08 □ 2R7M	RoHS	2.7			48	0.019	3.5		
LH L 08 □ 3R3M	RoHS	3.3			41	0.021	3.2		
LH L 08 □ 3R9M	RoHS	3.9			33	0.024	3.1		
LH L 08 □ 4R7M	RoHS	4.7			30	0.025	3.0		
LH L 08 □ 5R6M	RoHS	5.6			23	0.028	2.9		
LH L 08 □ 6R8M	RoHS	6.8			21	0.030	2.8		
LH L 08 □ 8R2M	RoHS	8.2			19	0.034	2.5		
LH L 08 □ 100K	RoHS	10		± 10%	65	17	0.041	2.4	2.52
LH L 08 □ 120K	RoHS	12	50		16	0.044	2.3		
LH L 08 □ 150K	RoHS	15			13	0.053	2.0		
LH L 08 □ 180K	RoHS	18			12	0.060	1.9		
LH L 08 □ 220K	RoHS	22			11	0.068	1.8		
LH L 08 □ 270K	RoHS	27			10	0.091	1.5		
LH L 08 □ 330K	RoHS	33			40	8.8	0.10	1.4	
LH L 08 □ 390K	RoHS	39				8.4	0.12	1.3	
LH L 08 □ 470K	RoHS	47				8.2	0.15	1.2	
LH L 08 □ 560K	RoHS	56				7.9	0.17	1.1	
LH L 08 □ 680K	RoHS	68		35	7.0	0.20	1.0	0.796	
LH L 08 □ 820K	RoHS	82	6.5		0.22	0.90			
LH L 08 □ 101K	RoHS	100	25	5.7	0.32	0.79			
LH L 08 □ 121K	RoHS	120		5.2	0.36	0.70			
LH L 08 □ 151K	RoHS	150	20	4.7	0.41	0.64			
LH L 08 □ 181K	RoHS	180	35	4.2	0.66	0.60			
LH L 08 □ 221K	RoHS	220		3.7	0.73	0.53			
LH L 08 □ 271K	RoHS	270	25	3.5	0.85	0.51			
LH L 08 □ 331K	RoHS	330		3.2	0.97	0.44			
LH L 08 □ 391K	RoHS	390	20	2.9	1.1	0.41			
LH L 08 □ 471K	RoHS	470	25	2.4	1.3	0.38	0.252		
LH L 08 □ 561K	RoHS	560		2.2	1.5	0.35			
LH L 08 □ 681K	RoHS	680		2.0	1.8	0.32			
LH L 08 □ 821K	RoHS	820	30	1.6	2.3	0.30			
LH L 08 □ 102J	RoHS	1000	55	1.5	2.7	0.25		0.0796	
LH L 08 □ 122J	RoHS	1200	45	1.4	3.2	0.22			
LH L 08 □ 152J	RoHS	1500	55	1.3	4.1	0.20			
LH L 08 □ 182J	RoHS	1800		1.2	4.8	0.19			
LH L 08 □ 222J	RoHS	2200		1.1	5.6	0.16			
LH L 08 □ 272J	RoHS	2700		1.0	7.5	0.15			
LH L 08 □ 332J	RoHS	3300		0.85	8.5	0.14			
LH L 08 □ 392J	RoHS	3900		0.78	9.7	0.11			
LH L 08 □ 472J	RoHS	4700	65	0.68	14	0.10			
LH L 08 □ 562J	RoHS	5600		0.62	16	0.093			
LH L 08 □ 682J	RoHS	6800		0.61	18	0.092			
LH L 08 □ 822J	RoHS	8200		0.60	20	0.084			
LH L 08 □ 103J	RoHS	10000	60	0.48	32	0.070			
LH L 08 □ 123J	RoHS	12000		0.44	36	0.064			
LH L 08 □ 153J	RoHS	15000		0.35	62	0.051			
LH L 08 □ 183J	RoHS	18000		0.30	72	0.048			
LH L 08 □ 223J	RoHS	22000		0.28	82	0.044			
LH L 08 □ 273J	RoHS	27000		0.25	90	0.042			
LH L 08 □ 333J	RoHS	33000		0.23	100	0.040			

形名の□には包装記号 (TB : テーピング, NB : 単品) が入ります。

□ Please specify the packaging code. (TB : Taping, NB : Bulk)



LHLC08

形名 Ordering code	EHS (Environmental Hazardous Substances)	公称 インダクタンス Inductance [ $\mu$ H]	インダクタンス 許容差 Inductance Tolerance	Q (min.)	自己共振 周波数 Self-resonant frequency [MHz] (min.)	直流抵抗 DC Resistance [ $\Omega$ ] (max.)	定格電流 Rated current [A] (max.)	測定 周波数 Measuring frequency [MHz]
LH LC08□□1R0N	RoHS	1.0	± 30%	40	76	0.013	5.4	7.96
LH LC08□□1R5M	RoHS	1.5	± 20%		65	0.014	5.2	
LH LC08□□2R2M	RoHS	2.2			56	0.017	4.8	
LH LC08□□2R7M	RoHS	2.7			48	0.019	4.2	
LH LC08□□3R3M	RoHS	3.3			41	0.021	3.8	
LH LC08□□3R9M	RoHS	3.9			33	0.024	3.7	
LH LC08□□4R7M	RoHS	4.7			30	0.025	3.6	
LH LC08□□5R6M	RoHS	5.6			23	0.028	3.5	
LH LC08□□6R8M	RoHS	6.8			21	0.030	3.4	
LH LC08□□8R2M	RoHS	8.2			19	0.034	3.0	
LH LC08□□100K	RoHS	10		± 10%	65	17	0.041	2.9
LH LC08□□120K	RoHS	12	50		16	0.044	2.8	
LH LC08□□150K	RoHS	15			13	0.053	2.6	
LH LC08□□180K	RoHS	18			12	0.060	2.4	
LH LC08□□220K	RoHS	22			11	0.068	2.3	
LH LC08□□270K	RoHS	27	40		10	0.091	2.0	
LH LC08□□330K	RoHS	33			8.8	0.10	1.9	
LH LC08□□390K	RoHS	39			8.4	0.12	1.7	
LH LC08□□470K	RoHS	47			8.2	0.15	1.5	
LH LC08□□560K	RoHS	56	35		7.9	0.17	1.4	
LH LC08□□680K	RoHS	68		7.0	0.20	1.3		
LH LC08□□820K	RoHS	82		6.5	0.22	1.2		
LH LC08□□101K	RoHS	100		5.7	0.32	1.0		
LH LC08□□121K	RoHS	120	25	5.2	0.36	0.96	0.796	
LH LC08□□151K	RoHS	150	20	4.7	0.41	0.88		
LH LC08□□181K	RoHS	180	35	4.2	0.66	0.71		
LH LC08□□221K	RoHS	220		3.7	0.73	0.66		
LH LC08□□271K	RoHS	270	25	3.5	0.85	0.63		
LH LC08□□331K	RoHS	330		3.2	0.97	0.59		
LH LC08□□391K	RoHS	390	20	2.9	1.1	0.55		
LH LC08□□471K	RoHS	470	25	2.4	1.3	0.49		
LH LC08□□561K	RoHS	560		2.2	1.5	0.47		
LH LC08□□681K	RoHS	680		2.0	1.8	0.44		
LH LC08□□821K	RoHS	820		1.6	2.3	0.38		
LH LC08□□102J	RoHS	1000	55	1.5	2.7	0.35	0.252	
LH LC08□□122J	RoHS	1200	45	1.4	3.2	0.31		
LH LC08□□152J	RoHS	1500	55	1.3	4.1	0.29		
LH LC08□□182J	RoHS	1800		1.2	4.8	0.26		
LH LC08□□222J	RoHS	2200		1.1	5.6	0.23		
LH LC08□□272J	RoHS	2700		1.0	7.5	0.21		
LH LC08□□332J	RoHS	3300		0.85	8.5	0.19		
LH LC08□□392J	RoHS	3900	0.78	9.7	0.18			
LH LC08□□472J	RoHS	4700	65	0.68	14	0.16		
LH LC08□□562J	RoHS	5600		0.62	16	0.15		
LH LC08□□682J	RoHS	6800		0.61	18	0.14		
LH LC08□□822J	RoHS	8200		0.60	20	0.13		
LH LC08□□103J	RoHS	10000	60	0.48	32	0.11	L:1kHz Q:0.0796	
LH LC08□□123J	RoHS	12000		0.44	36	0.084		
LH LC08□□153J	RoHS	15000		0.35	62	0.068		
LH LC08□□183J	RoHS	18000		0.30	72	0.066		
LH LC08□□223J	RoHS	22000		0.28	82	0.057		
LH LC08□□273J	RoHS	27000		0.25	90	0.054		
LH LC08□□333J	RoHS	33000		0.23	100	0.053		

形名の□には包装記号 (TB: テーピング, NB: 単品) が入ります。

□ Please specify the packaging code. (TB: Taping, NB: Bulk)

LHL10

形名 Ordering code	EHS (Environmental Hazardous Substances)	公称 インダクタンス Inductance [μH]	インダクタンス 許容差 Inductance Tolerance	Q (min.)	自己共振 周波数 Self-resonant frequency [MHz] (min.)	直流抵抗 DC Resistance [Ω] (max.)	定格電流 Rated current [A] (max.)	測定 周波数 Measuring frequency [MHz]
LH L 10 □ 3R3M	RoHS	3.3	± 20%	50	46	0.019	4.2	7.96
LH L 10 □ 3R9M	RoHS	3.9			40	0.022	4.1	
LH L 10 □ 4R7M	RoHS	4.7			38	0.024	4.0	
LH L 10 □ 5R6M	RoHS	5.6			34	0.025	3.8	
LH L 10 □ 6R8M	RoHS	6.8			30	0.028	3.4	
LH L 10 □ 8R2M	RoHS	8.2			24	0.031	3.3	
LH L 10 □ 100K	RoHS	10	± 10%	90	19	0.034	3.2	2.52
LH L 10 □ 120K	RoHS	12			16	0.038	2.8	
LH L 10 □ 150K	RoHS	15			12	0.042	2.6	
LH L 10 □ 180K	RoHS	18			9.2	0.046	2.4	
LH L 10 □ 220K	RoHS	22		60	8.6	0.061	2.1	
LH L 10 □ 270K	RoHS	27			7.1	0.069	2.0	
LH L 10 □ 330K	RoHS	33			6.8	0.078	1.9	
LH L 10 □ 390K	RoHS	39		50	6.7	0.085	1.8	
LH L 10 □ 470K	RoHS	47			6.2	0.093	1.7	
LH L 10 □ 560K	RoHS	56		40	5.2	0.10	1.6	
LH L 10 □ 680K	RoHS	68			4.9	0.12	1.5	
LH L 10 □ 820K	RoHS	82			4.7	0.13	1.4	
LH L 10 □ 101K	RoHS	100			3.8	0.18	1.2	
LH L 10 □ 121K	RoHS	120			3.2	0.25	1.0	
LH L 10 □ 151K	RoHS	150			2.9	0.29	0.95	
LH L 10 □ 181K	RoHS	180			2.6	0.40	0.80	
LH L 10 □ 221K	RoHS	220			2.3	0.44	0.75	
LH L 10 □ 271K	RoHS	270			30	2.1	0.50	
LH L 10 □ 331K	RoHS	330	2.0			0.56	0.68	
LH L 10 □ 391K	RoHS	390	1.8	0.62		0.63		
LH L 10 □ 471K	RoHS	470	1.7	0.84		0.57		
LH L 10 □ 561K	RoHS	560	1.5	0.93	0.52			
LH L 10 □ 681K	RoHS	680	1.4	1.0	0.48			
LH L 10 □ 821K	RoHS	820	1.3	1.4	0.42			
LH L 10 □ 102J	RoHS	1000	± 5%	50	1.2	1.8	0.41	0.252
LH L 10 □ 122J	RoHS	1200			0.87	2.3	0.33	
LH L 10 □ 152J	RoHS	1500			0.83	2.7	0.30	
LH L 10 □ 182J	RoHS	1800			0.75	3.0	0.29	
LH L 10 □ 222J	RoHS	2200			0.70	3.9	0.25	
LH L 10 □ 272J	RoHS	2700			0.67	4.3	0.24	
LH L 10 □ 332J	RoHS	3300			0.56	5.8	0.21	
LH L 10 □ 392J	RoHS	3900			0.54	6.4	0.20	
LH L 10 □ 472J	RoHS	4700			0.49	7.1	0.19	
LH L 10 □ 562J	RoHS	5600			0.41	9.0	0.17	
LH L 10 □ 682J	RoHS	6800			0.38	10	0.16	
LH L 10 □ 822J	RoHS	8200			0.36	12	0.15	
LH L 10 □ 103J	RoHS	10000		60	0.29	19	0.12	L:1kHz Q:0.0796
LH L 10 □ 123J	RoHS	12000			0.27	21	0.11	
LH L 10 □ 153J	RoHS	15000			0.24	34	0.090	
LH L 10 □ 183J	RoHS	18000			0.21	38	0.081	
LH L 10 □ 223J	RoHS	22000			0.20	43	0.075	
LH L 10 □ 273J	RoHS	27000			0.15	67	0.060	
LH L 10 □ 333J	RoHS	33000		40	0.14	76	0.056	
LH L 10 □ 393J	RoHS	39000			0.13	84	0.053	
LH L 10 □ 473J	RoHS	47000			0.12	96	0.050	
LH L 10 □ 563J	RoHS	56000			30	0.10	170	
LH L 10 □ 683J	RoHS	68000		0.095		200	0.035	
LH L 10 □ 823J	RoHS	82000		0.088		210	0.033	
LH L 10 □ 104J	RoHS	100000	0.085	240		0.031		
LH L 10 □ 124J	RoHS	120000	0.070	260		0.030		
LH L 10 □ 154J	RoHS	150000	0.069	300		0.028		

形名の□には包装記号 (TB : テーピング, NB : 単品) が入ります。

□ Please specify the packaging code. (TB : Taping, NB : Bulk)



LHLC10

形名 Ordering code	EHS (Environmental Hazardous Substances)	公称 インダクタンス Inductance [μH]	インダクタンス 許容差 Inductance Tolerance	Q (min.)	自己共振 周波数 Self-resonant frequency [MHz] (min.)	直流抵抗 DC Resistance [Ω] (max.)	定格電流 Rated current [A] (max.)	測定 周波数 Measuring frequency [MHz]	
LH LC10□□3R3M	RoHS	3.3	± 20%	50	46	0.019	5.0	7.96	
LH LC10□□3R9M	RoHS	3.9			40	0.022	4.8		
LH LC10□□4R7M	RoHS	4.7			38	0.024	4.7		
LH LC10□□5R6M	RoHS	5.6			34	0.025	4.5		
LH LC10□□6R8M	RoHS	6.8			30	0.028	4.1		
LH LC10□□8R2M	RoHS	8.2			24	0.031	3.9		
LH LC10□□100K	RoHS	10	± 10%	90	19	0.034	3.6	2.52	
LH LC10□□120K	RoHS	12			16	0.038	3.4		
LH LC10□□150K	RoHS	15			12	0.042	3.2		
LH LC10□□180K	RoHS	18			9.2	0.046	3.0		
LH LC10□□220K	RoHS	22		60	8.6	0.061	2.8		
LH LC10□□270K	RoHS	27			7.1	0.069	2.7		
LH LC10□□330K	RoHS	33			6.8	0.078	2.6		
LH LC10□□390K	RoHS	39			6.7	0.085	2.4		
LH LC10□□470K	RoHS	47		50	6.2	0.093	2.3		
LH LC10□□560K	RoHS	56			5.2	0.10	2.1		
LH LC10□□680K	RoHS	68			40	4.6	0.12		2.0
LH LC10□□820K	RoHS	82				4.7	0.13		1.8
LH LC10□□101K	RoHS	100		3.8		0.18	1.5		
LH LC10□□121K	RoHS	120		3.2		0.25	1.3		
LH LC10□□151K	RoHS	150		30	2.9	0.29	1.2		
LH LC10□□181K	RoHS	180			2.6	0.40	1.0		
LH LC10□□221K	RoHS	220			2.3	0.44	0.97		
LH LC10□□271K	RoHS	270			2.1	0.50	0.90		
LH LC10□□331K	RoHS	330		0.796		0.56	0.86		
LH LC10□□391K	RoHS	390				1.8	0.62		0.75
LH LC10□□471K	RoHS	470				1.7	0.84		0.65
LH LC10□□561K	RoHS	560			1.5	0.93	0.61		
LH LC10□□681K	RoHS	680		1.4	1.0	0.57			
LH LC10□□821K	RoHS	820		1.3	1.4	0.50			
LH LC10□□102J	RoHS	1000	± 5%	50	1.2	1.8	0.48	0.252	
LH LC10□□122J	RoHS	1200			0.87	2.3	0.40		
LH LC10□□152J	RoHS	1500			0.83	2.7	0.37		
LH LC10□□182J	RoHS	1800			0.75	3.0	0.36		
LH LC10□□222J	RoHS	2200			0.70	3.9	0.32		
LH LC10□□272J	RoHS	2700			0.67	4.3	0.30		
LH LC10□□332J	RoHS	3300			0.56	5.8	0.26		
LH LC10□□392J	RoHS	3900			0.54	6.4	0.25		
LH LC10□□472J	RoHS	4700			0.49	7.1	0.24		
LH LC10□□562J	RoHS	5600			0.41	9.0	0.21		
LH LC10□□682J	RoHS	6800			0.38	10	0.20		
LH LC10□□822J	RoHS	8200			0.36	12	0.18		
LH LC10□□103J	RoHS	10000		60	0.29	19	0.14		L:1kHz Q:0.0796
LH LC10□□123J	RoHS	12000			0.27	21	0.13		
LH LC10□□153J	RoHS	15000			0.24	34	0.11		
LH LC10□□183J	RoHS	18000			0.21	38	0.10		
LH LC10□□223J	RoHS	22000			0.20	43	0.095		
LH LC10□□273J	RoHS	27000			0.15	67	0.076		
LH LC10□□333J	RoHS	33000		40	0.14	76	0.068		
LH LC10□□393J	RoHS	39000			0.13	84	0.065		
LH LC10□□473J	RoHS	47000			0.12	96	0.061		
LH LC10□□563J	RoHS	56000			30	0.10	170		
LH LC10□□683J	RoHS	68000		0.095		200	0.043		
LH LC10□□823J	RoHS	82000		0.088		210	0.041		
LH LC10□□104J	RoHS	100000	0.085	240		0.038			
LH LC10□□124J	RoHS	120000	0.070	260		0.037			
LH LC10□□154J	RoHS	150000	0.069	300		0.035			
L:1kHz Q:0.0252									

形名の□には包装記号 (TB : テーピング, NB : 単品) が入ります。

□ Please specify the packaging code. (TB : Taping, NB : Bulk)

LHL13

形名 Ordering code	EHS (Environmental Hazardous Substances)	公称 インダクタンス Inductance [μH]	インダクタンス 許容差 Inductance Tolerance	Q (min.)	自己共振 周波数 Self-resonant frequency [MHz] (min.)	直流抵抗 DC Resistance [Ω] (max.)	定格電流 Rated current [A] (max.)	測定 周波数 Measuring frequency [MHz]	
LH L 13 □ 100K	RoHS	10	± 10%	140	19	0.023	4.5	2.52	
LH L 13 □ 150K	RoHS	15			12	0.028	4.0		
LH L 13 □ 220K	RoHS	22			100	7.6	0.035		3.4
LH L 13 □ 330K	RoHS	33		6.9		0.043	3.2		
LH L 13 □ 470K	RoHS	47		5.6		0.052	2.8		
LH L 13 □ 680K	RoHS	68		50	4.4	0.070	2.4		0.796
LH L 13 □ 101K	RoHS	100			3.3	0.12	2.0		
LH L 13 □ 151K	RoHS	150			2.6	0.19	1.5		
LH L 13 □ 221K	RoHS	220		40	2.2	0.23	1.3		
LH L 13 □ 331K	RoHS	330			30	1.8	0.35	1.1	
LH L 13 □ 471K	RoHS	470				1.5	0.43	0.90	
LH L 13 □ 681K	RoHS	680		1.2		0.61	0.80		
LH L 13 □ 102J	RoHS	1000	± 5%	40	1.0	1.2	0.60	0.252	
LH L 13 □ 152J	RoHS	1500			0.83	1.8	0.45		
LH L 13 □ 222J	RoHS	2200			0.70	2.2	0.40		
LH L 13 □ 332J	RoHS	3300			0.60	3.4	0.33		
LH L 13 □ 472J	RoHS	4700			0.43	4.7	0.28		
LH L 13 □ 682J	RoHS	6800			0.38	5.6	0.25		
LH L 13 □ 103J	RoHS	10000			70	0.30	10		0.19

形名の□には包装記号 (TB: テーピング, NB: 単品) が入ります。

□ Please specify the packaging code. (TB: Taping, NB: Bulk)

LHL16

形名 Ordering code	EHS (Environmental Hazardous Substances)	公称 インダクタンス Inductance [μH]	インダクタンス 許容差 Inductance Tolerance	Q (min.)	自己共振 周波数 Self-resonant frequency [MHz] (min.)	直流抵抗 DC Resistance [Ω] (max.)	定格電流 Rated current [A] (max.)	測定 周波数 Measuring frequency [MHz]
LH L 16 □ 470K	RoHS	47	± 10%	70	4.5	0.046	3.7	2.52
LH L 16 □ 680K	RoHS	68			3.9	0.054	3.3	
LH L 16 □ 101K	RoHS	100			60	2.7	0.077	
LH L 16 □ 151K	RoHS	150		2.3		0.11	2.4	
LH L 16 □ 221K	RoHS	220		1.9		0.15	2.0	
LH L 16 □ 331K	RoHS	330		40		1.6	0.21	1.5
LH L 16 □ 471K	RoHS	470			30	1.4	0.28	1.3
LH L 16 □ 681K	RoHS	680	1.2			0.35	1.1	
LH L 16 □ 102J	RoHS	1000	± 5%	20		0.84	0.74	0.86
LH L 16 □ 152J	RoHS	1500			0.69	0.93	0.75	
LH L 16 □ 222J	RoHS	2200			0.56	1.4	0.60	
LH L 16 □ 332J	RoHS	3300			0.49	2.2	0.50	
LH L 16 □ 472J	RoHS	4700			0.41	2.6	0.40	
LH L 16 □ 682J	RoHS	6800			0.35	3.9	0.33	
LH L 16 □ 103J	RoHS	10000			70	0.26	7.3	0.25

形名の□には包装記号 (TB: テーピング, NB: 単品) が入ります。

□ Please specify the packaging code. (TB: Taping, NB: Bulk)

LHLP10NB

形名 Ordering code	EHS (Environmental Hazardous Substances)	公称 インダクタンス Nominal Inductance [ $\mu$ H]	L測定 周波数 L Measuring frequency	インダクタンス 許容差 Inductance Tolerance [%]	直流抵抗 DC Resistance [ $\Omega$ ] (max.)	定格電流 Rated current [A] (max.)
LH LP10□100M	RoHS	10	2.52	± 20	0.038	2.5
LH LP10□150M	RoHS	15			0.049	2.2
LH LP10□220M	RoHS	22			0.075	1.9
LH LP10□330M	RoHS	33			0.094	1.7
LH LP10□470M	RoHS	47			0.15	1.3
LH LP10□680M	RoHS	68			0.23	1.0
LH LP10□101K	RoHS	100	0.796	± 10	0.30	0.90
LH LP10□151K	RoHS	150			0.47	0.78
LH LP10□221K	RoHS	220			0.70	0.63
LH LP10□331K	RoHS	330			0.88	0.58
LH LP10□471K	RoHS	470			1.3	0.46
LH LP10□681K	RoHS	680			1.9	0.38
LH LP10□102K	RoHS	1000	0.252		3.2	0.30

形名の□には包装記号 (TB : テーピング, NB : 単品) が入ります。

□ Please specify the packaging code. (TB : Taping, NB : Bulk)

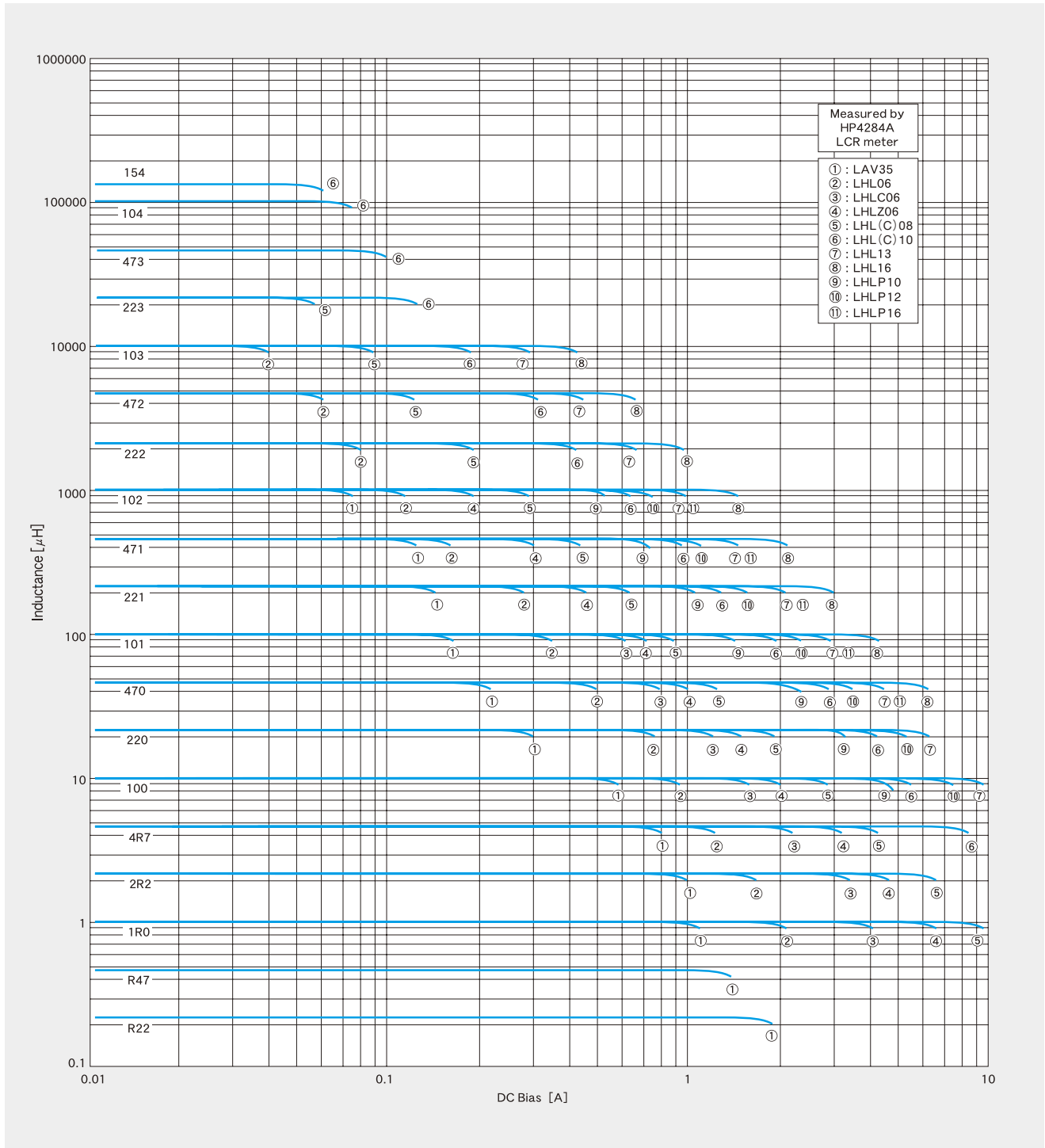
LHLP12NB

形名 Ordering code	EHS (Environmental Hazardous Substances)	公称 インダクタンス Nominal Inductance [ $\mu$ H]	L測定 周波数 L Measuring frequency	インダクタンス 許容差 Inductance Tolerance [%]	直流抵抗 DC Resistance [ $\Omega$ ] (max.)	定格電流 Rated current [A] (max.)
LH LP12NB150M	RoHS	15	2.52	± 20	0.035	3.3
LH LP12NB220M	RoHS	22			0.050	2.7
LH LP12NB330M	RoHS	33			0.070	2.4
LH LP12NB470M	RoHS	47			0.081	2.1
LH LP12NB680M	RoHS	68			0.12	1.7
LH LP12NB101K	RoHS	100	0.796	± 10	0.16	1.6
LH LP12NB151K	RoHS	150			0.24	1.3
LH LP12NB221K	RoHS	220			0.38	0.95
LH LP12NB331K	RoHS	330			0.46	0.89
LH LP12NB471K	RoHS	470			0.69	0.74
LH LP12NB681K	RoHS	680			1.1	0.58
LH LP12NB102K	RoHS	1000	0.252		1.8	0.46

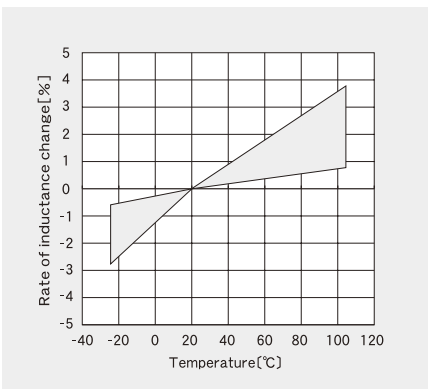
LHLP16NB

形名 Ordering code	EHS (Environmental Hazardous Substances)	公称 インダクタンス Nominal Inductance [ $\mu$ H]	L測定 周波数 L Measuring frequency	インダクタンス 許容差 Inductance Tolerance [%]	直流抵抗 DC Resistance [ $\Omega$ ] (max.)	定格電流 Rated current [A] (max.)
LH LP16NB100M	RoHS	10	1kHz	± 20	0.019	5.2
LH LP16NB150M	RoHS	15			0.025	5.1
LH LP16NB220M	RoHS	22			0.027	4.6
LH LP16NB330M	RoHS	33			0.035	4.0
LH LP16NB470K	RoHS	47			0.045	3.4
LH LP16NB680K	RoHS	68		0.062	3.1	
LH LP16NB101K	RoHS	100		± 10	0.091	2.3
LH LP16NB151K	RoHS	150			0.14	1.9
LH LP16NB221K	RoHS	220			0.20	1.5
LH LP16NB331K	RoHS	330			0.31	1.3
LH LP16NB471K	RoHS	470	0.47		1.0	
LH LP16NB681K	RoHS	680		0.58	0.98	
LH LP16NB102K	RoHS	1000			0.94	0.74

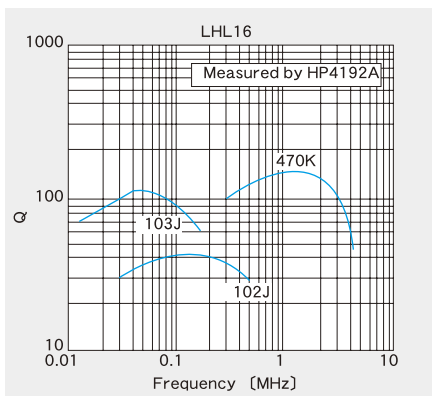
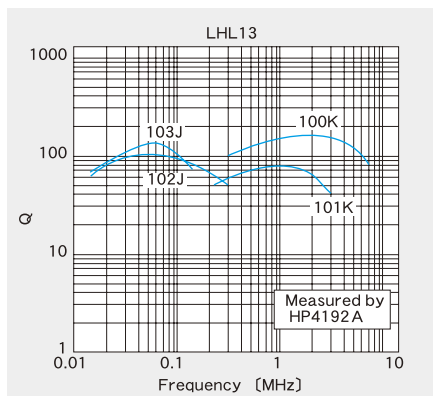
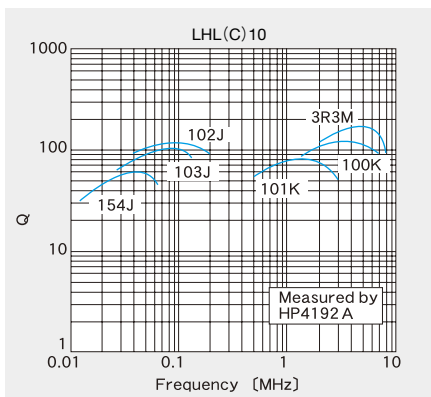
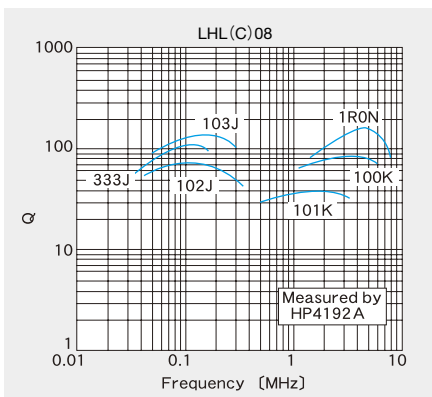
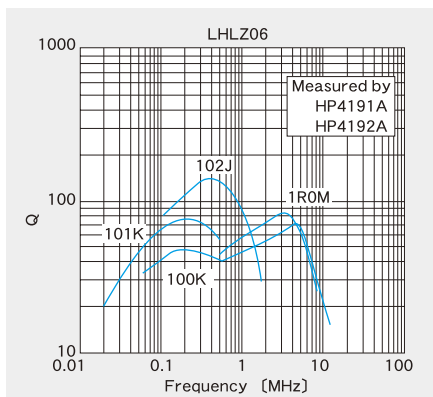
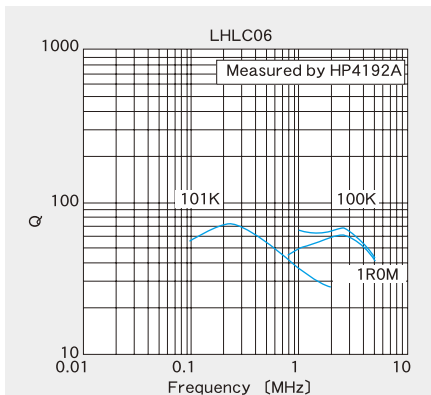
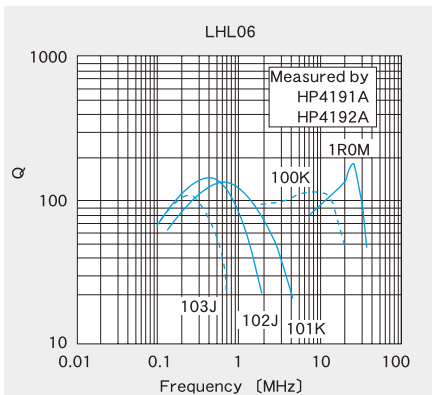
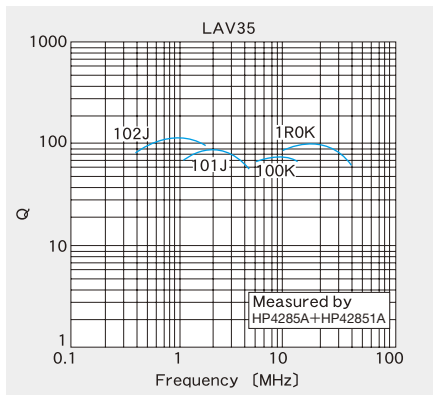
直流重畳特性例 DC Bias characteristics



インダクタンス温度特性例 Temperature characteristics



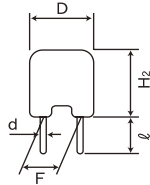
Q—周波数特性例 Q-vs- Frequency characteristics



①最小受注単位数 Minimum Quantity

形式 (EIA) Type	標準数量 (pcs) Standard quantity		
	箱づめ Box	袋づめ Bulk	テーピング Taped
LAV 35	—	—	2000
LHL 06	—	500	2000
LHLC06	—	500	2000
LHLZ06	—	500	1500
LHL (C) 08	—	100	1000
LHL (C) 10	—	50	500
LHL 13	—	25	500
LHL 16	500	—	250
LHLP10	500	—	200
LHLP12NB	300	—	—
LHLP16NB	200	—	—

LHL08~16

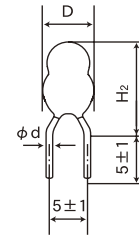


形式 Type	寸法 Dimensions (mm)				
	$\phi D$ (max)	$H_2$ (max)	F*	$l$	$\phi d$
LHL (C) 08	9.0 (0.354)	9.5 (0.374)	5.0±1.0 (0.197±0.039)	5.0±1.0 (0.197±0.039)	0.6±0.05 (0.024±0.002)
LHL (C) 10	11.0 (0.433)	14.0 (0.551)	5.0±1.0 (0.197±0.039)	5.0±1.0 (0.197±0.039)	0.6±0.05 (0.024±0.002)
LHL 13	14.0 (0.551)	17.0 (0.669)	7.5±1.0 (0.295±0.039)	5.0±1.0 (0.197±0.039)	0.8±0.05 (0.031±0.002)
LHL 16	17.0 (0.669)	21.0 (0.827)	7.5±1.0 (0.295±0.039)	5.0±1.0 (0.197±0.039)	0.8±0.05 (0.031±0.002)

\*リード端子根元 (接着部) 寸法とする。 Unit : mm (inch)  
\* Measured at the base of the leads.

②製品単品寸法 Bulk dimensions

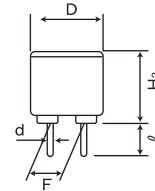
LHL06/LHLC06/LHLZ06



形式 Type	寸法 Dimensions (mm)		
	$\phi D$	$H_2$	$\phi d$
LHL 06	6.8max (0.268max)	11.0max (0.433max)	0.6±0.05 (0.024±0.002)
LHLC06	7.5max (0.295max)	11.0max (0.433max)	0.6±0.05 (0.024±0.002)
LHLZ06	7.8max (0.307max)	11.0max (0.433max)	0.6±0.05 (0.024±0.002)

\*リードキンク部分での寸法とする。 Unit : mm (inch)  
\* Distance from lead bent part to top of the body.

LHLP10~16

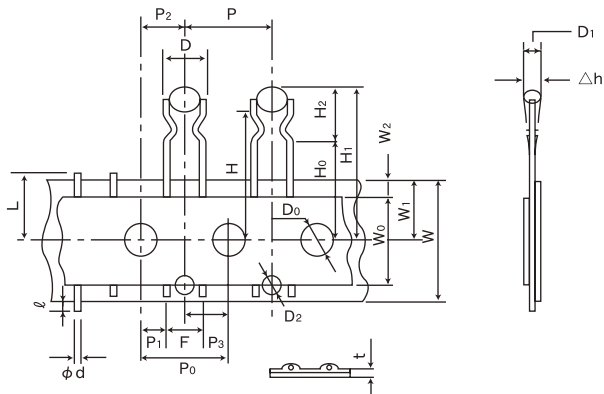


形式 Type	寸法 Dimensions (mm)				
	$\phi D$ (max)	$H_2$ (max)	F*	$l$	$\phi d$
LHLP10	11.0 (0.433)	11.0 (0.433)	5.0±1.0 (0.197±0.039)	5.0±1.0 (0.197±0.039)	0.6±0.05 (0.024±0.004)
LHLP12	13.0 (0.512)	16.0 (0.624)	5.0±1.0 (0.197±0.039)	5.0±1.0 (0.197±0.039)	0.6±0.05 (0.024±0.004)
LHLP16	17.0 (0.669)	19.0 (0.741)	7.5±1.0 (0.295±0.039)	5.0±1.0 (0.197±0.039)	0.8±0.05 (0.031±0.004)

\*リード端子根元 (接着部) 寸法とする。 Unit : mm (inch)  
\* Measured at the base of the leads.



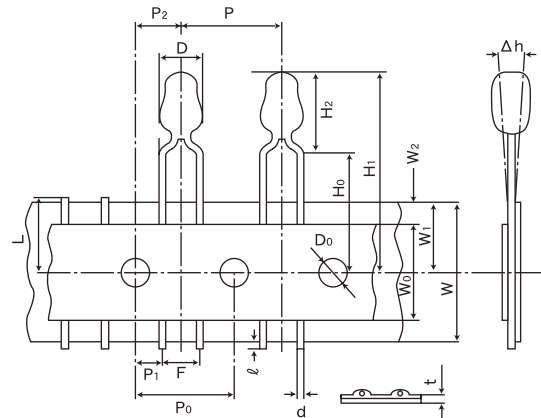
③テーピング寸法 Taping dimensions  
 ・LAV35VB



形式 Type	記号 Symbol	寸法 Dimensions	記号 Symbol	寸法 Dimensions
LAV35VB	D	6.0max (0.236max)	△h	0.0±2.0 (0.0±0.079)
	D <sub>1</sub>	4.0max (0.157max)	W	18.0 <sup>+1.0</sup> <sub>-0.5</sub> (0.709 <sup>+0.039</sup> <sub>-0.020</sub> )
	H <sub>1</sub>	25.0max (0.984max)	W <sub>0</sub>	12.5min (0.492min)
	H <sub>2</sub>	8.0max (0.315max)	W <sub>1</sub>	9.0 <sup>+0.75</sup> <sub>-0.5</sub> (0.354 <sup>+0.030</sup> <sub>-0.020</sub> )
	H	19.0 (参考値 Ref.) (0.748)	W <sub>2</sub>	3.0max <sup>**2</sup> (0.118max)
	H <sub>0</sub>	16.0±1.0 (0.630±0.039)	ℓ	2.0max (0.079max)
	P	12.7±1.0 (0.500±0.039)	D <sub>0</sub>	4.0±0.3 (0.157±0.012)
	P <sub>0</sub>	12.7±0.3 <sup>**1</sup> (0.500±0.012)	φd	0.50±0.05 (0.020±0.002)
	P <sub>1</sub>	3.85±0.5 (0.152±0.020)	L	11.0max (0.433max)
	P <sub>2</sub>	6.35±1.3 (0.250±0.051)	t	0.5±0.2 (0.020±0.008)
	F	5.0 <sup>+0.8</sup> <sub>-0.3</sub> (0.197 <sup>+0.031</sup> <sub>-0.012</sub> )	Unit : mm (inch)	
	D <sub>2</sub>	φ1.8 (0.071)		
	P <sub>3</sub>	6.35 (0.25)		

※1 20ピッチにつき、累積誤差±1mm以内。  
 ※2 貼付テープは台紙よりはみ出さないこと。  
 ※1 Accumulated error for 20 pitches is ± 1mm.  
 ※2 Bonding tape must not protrude from the base tape.

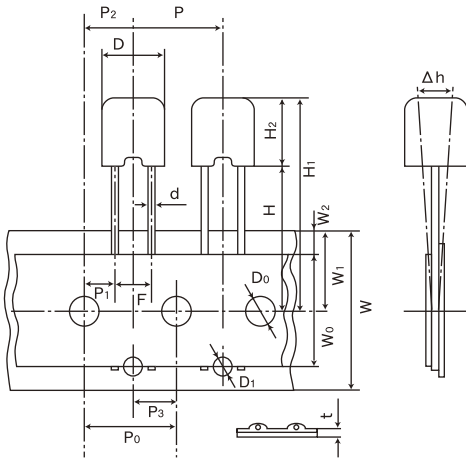
・LHL06/LHLC06/LHLZ06



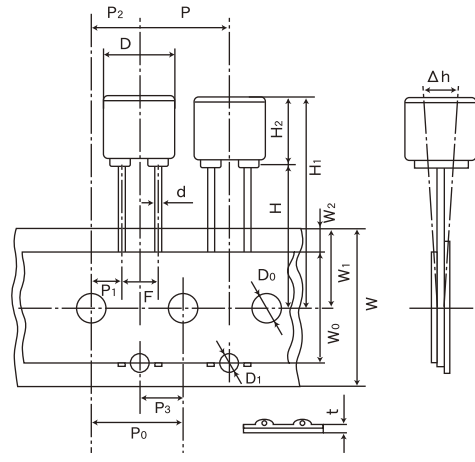
形式 Type	記号 Symbol	寸法 Dimensions	記号 Symbol	寸法 Dimensions
LHL 06 LHLC06 LHLZ06	D	φ6.8 (0.268) (L06) φ7.5 (0.295) (LCC6) φ7.8 (0.307) (LZC6)	W	18.0 <sup>+1.0</sup> <sub>-0.5</sub> (0.709 <sup>+0.039</sup> <sub>-0.020</sub> )
	H <sub>1</sub>	30.0max (1.18max)	W <sub>0</sub>	12.5min (0.492min)
	H <sub>2</sub>	11.0max (0.433max)	W <sub>1</sub>	9.0±0.5 (0.354±0.020)
	H <sub>0</sub>	16.0±1.0 (0.630±0.039)	W <sub>2</sub>	3.0max <sup>**2</sup> (0.118max)
	P	12.7±1.0 (0.500±0.039)	ℓ	2.0max (0.079max)
	P <sub>0</sub>	12.7±0.3 <sup>**1</sup> (0.500±0.012)	D <sub>0</sub>	φ4.0±0.2 (φ0.157±0.008)
	P <sub>1</sub>	3.85±0.7 (0.152±0.028)	φd	φ0.6±0.05 (φ0.024±0.002)
	P <sub>2</sub>	6.35±1.3 (0.250±0.051)	L	11.0max (0.433max)
	F	5.0 <sup>+0.8</sup> <sub>-0.2</sub> (0.0 <sup>+0.031</sup> <sub>-0.008</sub> )	t	0.6±0.3 (0.024±0.012)
	△h	0.0±2.0 (0.0±0.079)	Unit : mm (inch)	

※1 20ピッチにつき、累積誤差±1mm以内。  
 ※2 貼付テープは台紙よりはみ出さないこと。  
 ※1 Accumulated error for 20 pitches is ± 1mm.  
 ※2 Bonding tape must not protrude from the base tape.

・LHL08~16



・LHLP10TB



	LHL (C)08	LHL (C)10	LHL13	LHL16
D	φ 9.0max (φ 0.354max)	φ 11.0max (φ 0.433max)	φ 14.0max (φ 0.551max)	φ 17.0max (φ 0.669max)
H <sub>1</sub>	30.5max (1.20max)	34.0max (1.34max)	37.0max (1.46max)	41.0max (1.61max)
H	18.0 <sup>+2.0</sup> <sub>-0.0</sub> (0.709 <sup>+0.079</sup> <sub>-0.000</sub> )	18.0 <sup>+2.0</sup> <sub>-0.0</sub> (0.709 <sup>+0.079</sup> <sub>-0.000</sub> )	18.0 <sup>+2.0</sup> <sub>-0.0</sub> (0.709 <sup>+0.079</sup> <sub>-0.000</sub> )	18.0 <sup>+2.0</sup> <sub>-0.0</sub> (0.709 <sup>+0.079</sup> <sub>-0.000</sub> )
H <sub>2</sub>	9.5max (0.374max)	14.0max (0.551max)	17.0max (0.669max)	21.0max (0.827max)
P	12.7±1.0 (0.500±0.039)	12.7±1.0 (0.500±0.039)	15.0±1.0 (0.591±0.039)	30.0±1.0 (1.18±0.039)
P <sub>0</sub>	12.7±0.3 <sup>※1</sup> (0.500±0.012)	12.7±0.3 <sup>※1</sup> (0.500±0.012)	15.0±0.3 <sup>※1</sup> (0.591±0.012)	15.0±0.3 <sup>※1</sup> (0.591±0.012)
P <sub>1</sub>	3.85±0.7 (0.152±0.028)	3.85±0.7 (0.152±0.028)	3.75±0.7 (0.148±0.028)	3.75±0.7 (0.148±0.028)
P <sub>2</sub>	6.35±1.3 (0.250±0.051)	6.35±1.3 (0.250±0.051)	7.50±1.3 (0.295±0.051)	7.50±1.3 (0.295±0.051)
F	5.0 <sup>+0.8</sup> <sub>-0.2</sub> (0.197 <sup>+0.031</sup> <sub>-0.008</sub> )	5.0 <sup>+0.8</sup> <sub>-0.2</sub> (0.197 <sup>+0.031</sup> <sub>-0.008</sub> )	7.50 <sup>+0.8</sup> <sub>-0.2</sub> (0.295 <sup>+0.031</sup> <sub>-0.008</sub> )	7.50±0.5 (0.295±0.020)
h	0.0±2.0 (0.0±0.079)	0.0±2.0 (0.0±0.079)	0.0±2.0 (0.0±0.079)	0.0±2.0 (0.0±0.079)
W	18.0 <sup>+1.0</sup> <sub>-0.5</sub> (0.709 <sup>+0.039</sup> <sub>-0.020</sub> )	18.0 <sup>+1.0</sup> <sub>-0.5</sub> (0.709 <sup>+0.039</sup> <sub>-0.020</sub> )	18.0 <sup>+1.0</sup> <sub>-0.5</sub> (0.709 <sup>+0.039</sup> <sub>-0.020</sub> )	18.0 <sup>+1.0</sup> <sub>-0.5</sub> (0.709 <sup>+0.039</sup> <sub>-0.020</sub> )
W <sub>0</sub>	12.5min (0.492min)	12.5min (0.492min)	12.5min (0.492min)	12.5min (0.492min)
W <sub>1</sub>	9.0±0.5 (0.354±0.020)	9.0±0.5 (0.354±0.020)	9.0±0.5 (0.354±0.020)	9.0±0.5 (0.354±0.020)
W <sub>2</sub>	3.0max <sup>※2</sup> (0.118max)	3.0max <sup>※2</sup> (0.118max)	3.0max <sup>※2</sup> (0.118max)	3.0max <sup>※2</sup> (0.118max)
D <sub>0</sub>	φ 4.0±0.2 (φ 0.158±0.008)	φ 4.0±0.2 (φ 0.158±0.008)	φ 4.0±0.2 (φ 0.158±0.008)	φ 4.0±0.2 (φ 0.158±0.008)
φ d	φ 0.6±0.05 (φ 0.024±0.002)	φ 0.6±0.05 (φ 0.024±0.002)	φ 0.8±0.05 (φ 0.031±0.002)	φ 0.8±0.05 (φ 0.031±0.002)
t	0.6±0.3 (0.024±0.012)	0.6±0.3 (0.024±0.012)	0.6±0.3 (0.024±0.012)	0.6±0.3 (0.024±0.012)
D <sub>1</sub>	φ 1.8 (0.071)	φ 1.8 (0.071)	φ 1.8 (0.071)	—
P <sub>3</sub>	6.35 (0.25)	6.35 (0.25)	7.50 (0.25)	—

Unit : mm (inch)

- ※1 累積ピッチ誤差は20ピッチにつき1mm以内。
- ※2 貼付テープは台紙よりはみ出さないこと。
- ※1 Accumulated error for 20 pitches is 1mm.
- ※2 Bonding tape must not protrude from the base tape.

	LHLP10
D	φ 11.0max (φ 0.433max)
H <sub>1</sub>	32.0max (1.26max)
H	18.0 <sup>+2.0</sup> <sub>-0.0</sub> (0.709 <sup>+0.079</sup> <sub>-0.000</sub> )
H <sub>2</sub>	11.0max (0.433max)
P	12.7±1.0 (0.500±0.039)
P <sub>0</sub>	12.7±0.3 <sup>※1</sup> (0.500±0.012)
P <sub>1</sub>	3.85±0.7 (0.152±0.028)
P <sub>2</sub>	6.35±1.3 (0.250±0.051)
F	5.0 <sup>+0.8</sup> <sub>-0.2</sub> (0.197 <sup>+0.031</sup> <sub>-0.008</sub> )
h	0.0±2.0 (0.0±0.079)
W	18.0 <sup>+1.0</sup> <sub>-0.5</sub> (0.709 <sup>+0.039</sup> <sub>-0.020</sub> )
W <sub>0</sub>	12.5min (0.492min)
W <sub>1</sub>	9.0±0.5 (0.354±0.020)
W <sub>2</sub>	3.0max <sup>※2</sup> (0.118max)
D <sub>0</sub>	φ 4.0±0.2 (φ 0.158±0.008)
φ d	φ 0.6±0.05 (φ 0.024±0.002)
t	0.6±0.3 (0.024±0.012)
D <sub>1</sub>	φ 1.8 (0.071)
P <sub>3</sub>	6.35 (0.25)

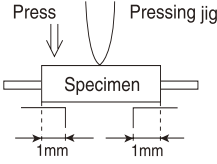
Unit : mm (inch)

- ※1 累積ピッチ誤差は20ピッチにつき1mm以内。
- ※2 貼付テープは台紙よりはみ出さないこと。
- ※1 Accumulated error for 20 pitches is 1mm.
- ※2 Bonding tape must not protrude from the base tape.

Item	Specified Value								Test Method and Remarks
	LA02 Type/ LA03 Type	LA04 Type	LA45 Type	LHL □□□	FBA/FBR	LAV35	FL05 □ Type	FL06BT Type	
1.Operating temperature Range	-25~+105°C				-25~+85°C	-25~+105°C			LA・FL : Including self-generated heat  LHL□□□ : Including self-generated heat [LHL□□□]
2.Storage temperature Range	-40~+85°C								
3.Rated current	Within the specified tolerance								LA : The maximum DC value having inductance within 10% and temperature increase within 20°C (LA45 : 40°C) by the application of DC bias. LHL□□□・LAV35 : The maximum DC value having inductance decrease within 10% (LHLC08, LHLC10 : within 30%) and temperature increase within the following specified temperature by the application of DC bias. Reference temperature : 20°C (LHL06, LAV35) : 25°C (LHL08, LHL10, LHL13) : 30°C (LHLC06, LHLZ06, LHL16, LHLP□□) : 40°C (LHLC08, LHLC10)  FB : No disconnection or appearance abnormality by continuous current application for 30 min. Chage after the application shall be within ±20% of the initial value.This is not guaranteed for electrical characteristics during current application.  FL : The maximum DC value having temperature rise within specified value.
4.Impedance					Within the specified tolerance			Refer to individual specification	FB : Measuring equipment : Impedance analyzer (HP4191A) or its equivalent Measuring frequency : Specified frequency  FL06BT : Measuring equipment : 4291A (HP) or its equivalent Measuring frequency : Specified frequency
5. Inductance	Within the specified tolerance					Within the specified tolerance			LA - LAV35 : Measuring equipment : LCR meter (HP4285A + HP42851A or its equivalent) Measuring frequency : Specified frequency LHL□□□ : Measuring equipment : LCR meter (HP4285A+HP42851A or its equivalent) LCR meter (HP4262A) or its equivalent (at 1kHz) Measuring frequency : Specified frequency  FL05R□ : Measuring equipment : HP4262A or its equivalent. Measuring frequency : 1kHz

Item	Specified Value								Test Method and Remarks												
	LA02 Type/ LA03 Type	LA04 Type	LA45 Type	LHL□□□	FBA/FBR	LAV35	FL05□ Type	FL06BT Type													
6.Q	Within the specified tolerance		/			Within the specified tolerance			LA · LAV35 : Measuring equipment : LCR meter (HP4285A+HP42851A or its equivalent) Measuring frequency : Specified frequency  LHL□□□ (except LHLP) : Measuring equipment : LCR meter (HP4285A+HP42851A or its equivalent) LCR meter (HP4262A) or its equivalent (at 1kHz) Measuring frequency : Specified frequency												
7.DC Resistance	Within the specified tolerance								LA : Measuring equipment : low ohmmeter (A&D AD5812 or its equivalent)  LHL□□□ · FB · LAV35 · FL : Measuring equipment : DC ohmmeter												
8.Self resonance frequency	Within the specified tolerance		/			Within the specified tolerance			LA · LAV35 : Measuring equipment : Network analyzer (Anritsu MS620J or its equivalent)  LHL□□□ (except LHLP) : Measuring equipment : (HP4191A, 4192A) its equivalent												
9.Temperature characteristic	$\Delta L/L$ : Within $\pm 5\%$		/	$\Delta L/L$ : Within $\pm 7\%$ (except LHLP16 : Within $\pm 20\%$ )		$\Delta L/L$ : Within $\pm 5\%$			LA · LAV35 : Change of maximum inductance deviation in step 1to5 <table border="1"> <thead> <tr> <th>step</th> <th>Temperature (°C)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>20</td> </tr> <tr> <td>2</td> <td>-25 (Minimum operating temperature)</td> </tr> <tr> <td>3</td> <td>20 (Standard temperature)</td> </tr> <tr> <td>4</td> <td>+85 (Maximum operating temperature)</td> </tr> <tr> <td>5</td> <td>20</td> </tr> </tbody> </table> LHL□□□ Change of maximum inductance deviation in step 1to5 Temperature at step 1 : 20°C Temperature at step 2 : Minimum operating temperature Temperature at step 3 : 20°C (Standard temperature) Temperature at step 4 : Maximum operating temperature Temperature at step 5 : 20°C	step	Temperature (°C)	1	20	2	-25 (Minimum operating temperature)	3	20 (Standard temperature)	4	+85 (Maximum operating temperature)	5	20
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	LA02 Type/ LA03 Type	LA04 Type	LA45 Type	LHL□□□	FBA/FBR	LAV35	FL05□ Type	FL06BT Type																						
10. Terminal strength : tensile force	No abnormality such as cut lead, or looseness.			No abnormality such as cut lead, or looseness.	No abnormality such as cut lead, or looseness.				LA : Apply the stated tensile force progressively in the direction to draw terminal. <table border="1"> <tr> <th>force (N)</th> <th>duration (S)</th> </tr> <tr> <td>25</td> <td>5</td> </tr> </table> LA45 : Apply the stated tensile force progressively in the direction to draw terminal. <table border="1"> <tr> <th>force (N)</th> <th>duration (S)</th> </tr> <tr> <td>10</td> <td>10</td> </tr> </table> LHL□□□ · LAV : Apply the stated tensile force progressively in the direction to draw terminal. <table border="1"> <tr> <th>Nominal wire diameter tensile <math>\phi d</math> (mm)</th> <th>force (N)</th> <th>duration(S)</th> </tr> <tr> <td>0.3 &lt; <math>\phi d</math> ≤ 0.5</td> <td>5</td> <td rowspan="3">30 ± 5</td> </tr> <tr> <td>0.5 &lt; <math>\phi d</math> ≤ 0.8</td> <td>10</td> </tr> <tr> <td>0.8 &lt; <math>\phi d</math> ≤ 1.2</td> <td>25</td> </tr> </table> FBA/FBR : A bead shall be fixed and static loaded 20 ± 1N (2.0 ± 0.1 kgf) in axial direction of lead wire in 10 ± 1 seconds. FL05R□ : Fix the component in the direction to draw terminal, and gradually apply the tensile force of 4.9 N.	force (N)	duration (S)	25	5	force (N)	duration (S)	10	10	Nominal wire diameter tensile $\phi d$ (mm)	force (N)	duration(S)	0.3 < $\phi d$ ≤ 0.5	5	30 ± 5	0.5 < $\phi d$ ≤ 0.8	10	0.8 < $\phi d$ ≤ 1.2	25			
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11. Over current			/	There shall be no scorch or short of wire. LHLC08, LHLC10 : There shall be no firing.					LHL□□□ : Measuring current : Rated current × 2 Duration : 5min. Number of measuring : one time																					
12. Terminal strength : bending	No abnormality such as cut lead, or looseness.								LA : Suspend a mass at the end the terminal, incline the body though angel of 90 and return it to initial position. This operation is done over a period of 2-3 sec. Then second bend in the opposite direction shall be made. Number of bends : Two times. <table border="1"> <tr> <th>Nominal wire diameter tensile <math>\phi d</math> (mm)</th> <th>Bending force (N)</th> <th>Mass reference weight (kg)</th> </tr> <tr> <td>0.3 &lt; <math>\phi d</math> ≤ 0.5</td> <td>2.5</td> <td>0.25</td> </tr> <tr> <td>0.5 &lt; <math>\phi d</math> ≤ 0.8</td> <td>5</td> <td>0.50</td> </tr> </table> LH · FB · LAV : Suspend a mass at the end the terminal, incline the body though angel of 90 and return it to initial position. This operation is done over a period of 2-3 sec. Then second bend in the opposite direction shall be made. Number of bends : Two times. <table border="1"> <tr> <th>Nominal wire diameter tensile <math>\phi d</math> (mm)</th> <th>Bending force (N)</th> <th>Mass reference weight (kg)</th> </tr> <tr> <td>0.3 &lt; <math>\phi d</math> ≤ 0.5</td> <td>2.5</td> <td>0.25</td> </tr> <tr> <td>0.5 &lt; <math>\phi d</math> ≤ 0.8</td> <td>5</td> <td>0.5</td> </tr> <tr> <td>0.8 &lt; <math>\phi d</math> ≤ 1.2</td> <td>10</td> <td>1.0</td> </tr> </table>	Nominal wire diameter tensile $\phi d$ (mm)	Bending force (N)	Mass reference weight (kg)	0.3 < $\phi d$ ≤ 0.5	2.5	0.25	0.5 < $\phi d$ ≤ 0.8	5	0.50	Nominal wire diameter tensile $\phi d$ (mm)	Bending force (N)	Mass reference weight (kg)	0.3 < $\phi d$ ≤ 0.5	2.5	0.25	0.5 < $\phi d$ ≤ 0.8	5	0.5	0.8 < $\phi d$ ≤ 1.2	10	1.0
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13. Insulation resistance : between the terminals and body			/	100MΩmin.					LHL□□□ : Applied voltage : 500 VDC Duration : 60 sec.																					
14. Insulation resistance : between terminals and core			/	1MΩmin. (Other than material code MA)					FBA · FBR : Applied voltage : 100 VDC Duration : 60 ± 5 sec.																					
15. Withstanding : between the terminals and body			/	No abnormality such as insulation damage					LHL□□□ : According to JIS C5102. 7. 1. 3 (C) Metal global method Applied voltage : 500 VDC Duration : 60 sec.																					

Item	Specified Value								Test Method and Remarks
	LA02 Type/ LA03 Type	LA04 Type	LA45 Type	LHL□□□	FBA/FBR	LAV35	FL05□ Type	FL06BT Type	
16.DC bias characteristic	△L/L : Within -10%					△L/L : -10% Within			LA・LAV35 : Measure inductance with application of rated current using LCR meter to compare it with the initial value.
17.Body strength	No abnormality as damage.				No abnormality such as cracks on body.	No abnormality as damage.			LA02・LAV35 : Applied force : 30N Duration : 10 sec. Speed : Shall attain to specified force in 2 sec.  LA03・LA04・LA45 : Applied force : 50N Duration : 10 sec. Speed : Shall attain to specified force in 2 sec.  FBA : Applied force : 50±3N Duration : 30±1 sec.  
18.Resistance to vibration	△L/L : Within±5% Q : 30min.	△L/L : Within±5% △Q/Q : Within±10%	△L/L : Within±5%	Appearance : No abnormality △L/L : Within±5% Q change : Within±30% (LHLP : only △L/L)	Appearance : No abnormality Impedance change : Within±20%	△L/L : Within±5% Q : 30min.			LA : Directions : 2 hrs each in X, Y and Z directions total : 6hrs. Frequency range : 10 to 55 to 10Hz(1min.) Amplitude : 1.5mm Mounting method : Soldering onto printed board. Recovery : At least 1hr of recovery under the standard condition after the test, followed by the measurement within 2hrs.  LHL□□□・FB・LAV : Directions : 2 hrs each in X, Y and Z directions total : 6hrs. Frequency range : 10 to 55 to 10Hz(1min.) Amplitude : 1.5mm (But don't exceed acceleration 196m/s (two power) Mounting method : Soldering onto printed board.



Item	Specified Value								Test Method and Remarks
	LA02 Type/ LA03 Type	LA04 Type	LA45 Type	LHL□□□	FBA/FBR	LAV35	FL05□ Type	FL06BT Type	
19. Resistance to shock	No significant abnormality in appearance					No significant abnormality in appearance			LA・LAV35 : Drop test Impact material : concrete or vinyl tile Height : 1m Total number of drops : 10 times
20. Solderability	At least 75% of terminal electrode is covered by new solder.		At least 75% of lead cir- cu- le is covered by new solder.	At least 90% of lead cir- cu- le is covered by new solder.	At least 75% of lead cir- cu- le is covered by new solder.				LA・LAV35 : Solder temperature : 230±5°C Duration : 2±0.5 sec.  LHL□□□ : Solder temperature : 235±5°C Duration : 2±0.5 sec. Immersion depth : Up to 1.5mm from bottom of kinked part. [LHL06, LHLC06, LHLZ06] : Up to 1.5mm from bottom of case. [LHL08, LHL10, LHL13, LHL16]  FB : Solder temperature : 230±5°C Duration : 3±1 sec. Immersion depth : Up to 1.5mm from terminal root.  FL05R□ : Solder temperature : 230±5°C Duration : 2±0.5 sec. Immersion depth : Up to 2~2.5mm from terminal root.  FL06BT : Solder temperature : 230±5°C Duration : 3±1 sec. Immersion depth : Up to 0.5~1.0mm from terminal root.

Item	Specified Value								Test Method and Remarks
	LA02 Type/ LA03 Type	LA04 Type	LA45 Type	LHL□□□	FBA/FBR	LAV35	FL05□ Type	FL06BT Type	
21. Resistance to soldering heat	No significant abnormality in appearance			No significant abnormality in appearance Inductance change : Within ±5% Q change : Within ±30% (LHLP : only ΔL/L)	No significant abnormality in appearance Impedance change : Within ±20%	ΔL/L : Within ±5% Q : 30min.	Refer to individual specification	No significant abnormality in appearance Impedance change : Within ±20%	<p>LA :</p> <p>Solder temperature : 260 ± 5°C (LA02) 270 ± 5°C (LA03 · LA04 · LA45)</p> <p>Duration : 5 ± 0.5 sec. One time</p> <p>Immersion conditions : Inserted into substrate with t = 1.6mm</p> <p>Recovery : At least 1hr of recovery under the standard condition after the test, followed by the measurement within 2hrs.</p> <p>LHL□□□ :</p> <p>Solder bath method Solder temperature : 260 ± 5°C Duration : 10 ± 1 sec. : Up to 1.5mm from bottom of kinked part. [LHL06, LHLC06, LHLZ06] : Up to 1.5mm from bottom of case. [LHL08, LHL10, LHL13, LHL16, LHLP□□]</p> <p>Manual soldering Solder temperature : 350 ± 10°C (At the tip of soldering iron) Duration : 5 ± 1 sec. : Up to 1.5mm from bottom of kinked part. [LHL06, LHLC06, LHLZ06] : Up to 1.5mm from bottom of case. [LHL08, LHL10, LHL13, LHL16, LHLP□□]</p> <p>Caution : No excessive pressing shall be applied to terminal</p> <p>Recovery : 4 to 24hrs of recovery under the standard condition after the test.</p> <p>FB :</p> <p>Solder bath method Condition 1 Solder temperature : 260 ± 5°C Duration : 10 ± 1 sec. Immersion depth : Up to 1.5mm from terminal root. Condition 2 Solder temperature : 350 ± 5°C Duration : 3 ± 1 sec. Immersion depth : Up to 1.5mm from terminal root. Recovery : 3hrs of recovery under the standard condition after the test.</p> <p>LAV35 :</p> <p>Solder temperature : 260 ± 5°C Duration : 5 ± 0.5 sec. Immersion depth : Up to 2.0 to 2.5mm from bottom of kinked part. Recovery : 4 to 24hrs of recovery under the standard condition after the test.</p> <p>FL :</p> <p>Solder condition : 260 ± 5°C 10 ± 1 sec. Immersion depth : Up to 0.5 to 1.0mm from terminal root. Recovery : 3hrs of recovery under the standard condition after the test.</p>

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22.Resistance to solvent	Please avoid the ultrasonic cleaning of this product.				No significant abnormality in appearance Impedance change : Within±20%	Please avoid the ultrasonic cleaning of this product.			FB : Solvent temperature : 20~25°C Duration : 30±5 sec. Solvent type : Acetone, trichloroethylene Recovery : 3hrs of recovery under the standard condition after the test.																																																												
23.Thermal shock	△L/L : Within±10% Q : 30min.	△L/L : Within±10% △Q/Q : Within±30%	△L/L : Within±10%	Appearance : No abnormality Inductance change : Within±10% Q change : Within±30% (LHLP : only △L/L)	Appearance : No abnormality Impedance change : Within±20%	△L/L : Within±10% Q : 20min.	Refer to individual specification	Appearance : No abnormality Impedance change : Within±20%	LA : Conditions for 1 cycle <table border="1"> <thead> <tr> <th>Step</th> <th>Temperature (°C)</th> <th>Duration (min)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-25<sup>+0</sup><sub>-3</sub></td> <td>30±3</td> </tr> <tr> <td>2</td> <td>Room temperature</td> <td>Within 3</td> </tr> <tr> <td>3</td> <td>+85<sup>+2</sup><sub>-0</sub></td> <td>30±3</td> </tr> <tr> <td>4</td> <td>Room temperature</td> <td>Within 3</td> </tr> </tbody> </table> Number of cycles : 5 cycles Recovery : At least 1hr of recovery under the standard condition after the removal from test chamber, followed by the measurement within 2hrs.  LHL□□□ · FB : According to JIS C0025 Conditions for 1 cycle <table border="1"> <thead> <tr> <th>Step</th> <th>Temperature (°C)</th> <th>Duration (min)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Minimum operating temperature<sup>+0</sup><sub>-3</sub></td> <td>30±3</td> </tr> <tr> <td>2</td> <td>Room temperature</td> <td>Within 3</td> </tr> <tr> <td>3</td> <td>Maximum operating temperature<sup>+2</sup><sub>-0</sub></td> <td>30±3</td> </tr> <tr> <td>4</td> <td>Room temperature</td> <td>Within 3</td> </tr> </tbody> </table> Number of cycles : 10 cycles (LHL□□□) : 5 cycles (FBA, FBR) Recovery : 4 to 24hrs of recovery under the standard condition after the removal from the test chamber. (LHL□□□) : 3hrs of recovery under the standard condition after the removal from the test chamber. (FBA, FBR)  LAV : Conditions for 1 cycle <table border="1"> <thead> <tr> <th>Step</th> <th>Temperature (°C)</th> <th>Duration (min)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Minimum operating temperature<sup>+0</sup><sub>-3</sub></td> <td>30±3</td> </tr> <tr> <td>2</td> <td>Room temperature</td> <td>Within 3</td> </tr> <tr> <td>3</td> <td>Maximum operating temperature<sup>+2</sup><sub>-0</sub></td> <td>30±3</td> </tr> <tr> <td>4</td> <td>Room temperature</td> <td>Within 3</td> </tr> </tbody> </table> Number of cycles : 10 cycles Recovery : At least 1hr of recovery under the standard condition after the removal from test chamber, followed by the measurement within 2hrs.  FL : According to JIS C0025 Conditions for 1 cycle <table border="1"> <thead> <tr> <th>Step</th> <th>Temperature (°C)</th> <th>Duration (min)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-25<sup>+0</sup><sub>-3</sub></td> <td>30±3</td> </tr> <tr> <td>2</td> <td>Room temperature</td> <td>Within 3</td> </tr> <tr> <td>3</td> <td>+85<sup>+2</sup><sub>-0</sub></td> <td>30±3</td> </tr> <tr> <td>4</td> <td>Room temperature</td> <td>Within 3</td> </tr> </tbody> </table> Number of cycles : 10 cycles Recovery : 1 to 2hrs of recovery under the standard condition after the removal from the test chamber.	Step	Temperature (°C)	Duration (min)	1	-25 <sup>+0</sup> <sub>-3</sub>	30±3	2	Room temperature	Within 3	3	+85 <sup>+2</sup> <sub>-0</sub>	30±3	4	Room temperature	Within 3	Step	Temperature (°C)	Duration (min)	1	Minimum operating temperature <sup>+0</sup> <sub>-3</sub>	30±3	2	Room temperature	Within 3	3	Maximum operating temperature <sup>+2</sup> <sub>-0</sub>	30±3	4	Room temperature	Within 3	Step	Temperature (°C)	Duration (min)	1	Minimum operating temperature <sup>+0</sup> <sub>-3</sub>	30±3	2	Room temperature	Within 3	3	Maximum operating temperature <sup>+2</sup> <sub>-0</sub>	30±3	4	Room temperature	Within 3	Step	Temperature (°C)	Duration (min)	1	-25 <sup>+0</sup> <sub>-3</sub>	30±3	2	Room temperature	Within 3	3	+85 <sup>+2</sup> <sub>-0</sub>	30±3	4	Room temperature	Within 3
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	LA02 Type/ LA03 Type	LA04 Type	LA45 Type	LHL□□□	FBA/FBR	LAV35	FL05□ Type	FL06BT Type	
24.Damp heat	△L/L : Within±10% Q : 30min.	△L/L : Within±10% △Q/Q : Within±30%	△L/L : Within±10%		Appearance : No abnormality Impedance change : Within±20%	△L/L : Within±10% Q : 20min.			LA・LAV35 : Temperature : 40±2°C Humidity : 90~95%RH Duration : 1000 hrs Recovery : At least 1hr of recovery under the standard removal from test chamber, followed by the measurement within 2hrs.  FB : Temperature : 60±2°C Humidity : 90~95%RH Duration : 1000 hrs Recovery : 1 to 2hrs of recovery under the standard condition after the removal from the test chamber.
25.Loading under damp heat	△L/L : Within±10% Q : 30min.	△L/L : Within±10% △Q/Q : Within±30%	△L/L : Within±10%	Appearance : No abnormality Inductance change : Within±10% Q change : Within±30% (LHLP : only △L/L)		△L/L : Within±10% Q : 20min.	Refer to individual specification	Appearance : No abnormality Impedance change : Within±20%	LA・LAV35 : Temperature : 40±2°C Humidity : 90~95%RH Duration : 1000 hrs Applied current : Rated current Recovery : At least 1hr of recovery under the standard removal from test chamber, followed by the measurement within 2hrs.  LHL□□□ : Temperature : 40±2°C Humidity : 90~95%RH Duration : 1000±24 hrs Applied current : Rated current Recovery : 1 to 2hrs of recovery under the standard condition after the removal from the test chamber.  FL : Temperature : 60±3°C Humidity : 90~95%RH Duration : 500 (+12, -0)hrs Applied current : Rated current Recovery : 1 to 2hrs of recovery under the standard condition after the removal from the test chamber.
26.Loading at high temperature	△L/L : Within±10% Q : 30min.	△L/L : Within±10% △Q/Q : Within±30%	△L/L : Within±10%			△L/L : Within±10% Q : 20min.			LA・LAV35 : Temperature : 85±2°C Duration : 1000 hrs Applied current : Rated current Recovery : At least 1hr of recovery under the standard removal from test chamber, followed by the measurement within 2hrs.

Item	Specified Value								Test Method and Remarks
	LA02 Type/ LA03 Type	LA04 Type	LA45 Type	LHL□□□	FBA/FBR	LAV35	FL05□ Type	FL06BT Type	
27.Low temperature life test	△L/L : Within±10% Q : 30min.	△L/L : Within±10% △Q/Q : Within±30%	△L/L : Within±10%	Appearance : No abnormality Inductance change : Within±10% Q change : Within±30% (LHLP : only △L/L)		△L/L : Within±10% Q : 20min.	Refer to individual specification	Appearance : No abnormality Impedance change : Within±20%	LA : Temperature : -25±2°C Duration : 1000 hrs Recovery : At least 1hr of recovery under the standard removal from test chamber, followed by the measurement within 2hrs.  LHL□□□ : Temperature : -40±3°C Duration : 1000±24 hrs Recovery : 1 to 2hrs of recovery under the standard condition after the removal from the test cfamber.  LAV35 : Temperature : -40±3°C Duration : 1000 hrs Recovery : At least 1hr of recovery under the standard removal from test chamber, followed by the measurement within 2hrs.  FL : Temperature : -40±3°C Duration : 500 (+12, -0) hrs Recovery : 1 to 2hrs of recovery under the standard condition after the removal from the test cfamber.
28.High temperature life test			/	Appearance : No abnormality Inductance change : Within±10% Q change : Within±30%			Refer to individual specification	Appearance : No abnormality Impedance change : Within±20%	LHL□□□ : Temperature : 105±3°C Duration : 1000±24 hrs Recovery : 1 to 2hrs of recovery under the standard condition after the removal from the test cfamber.  FL : Temperature : 85±3°C Duration : 500 (+12, -0) hrs Recovery : 1 to 2hrs of recovery under the standard condition after the removal from the test cfamber.

# PRECAUTIONS

LA Type, LH Type, FB Type, FL Type

Stages	Precautions	Technical considerations
1.Circuit Design	<p>Operating environment,</p> <p>1.The products described in this specification are intended for use in general electronic equipment,(office supply equipment, telecommunications systems, measuring equipment, and household equipment). They are not intended for use in mission-critical equipment or systems requiring special quality and high reliability (traffic systems, safety equipment, aerospace systems, nuclear control systems and medical equipment including life-support systems,) where product failure might result in loss of life, injury or damage. For such uses, contact TAIYO YUDEN Sales Department in advance.</p>	
2.PCB Design	<p>Design</p> <p>1.Please design insertion pitches of a base in the pitches that fitted a terminal interval.</p>	<p>1.When Inductors are mounted onto a PC board, hole dimensions on the board should match the lead pitch of the component, if not, it will cause breakage of the terminals or cracking of terminal roots covered with resin as excess stress travels through the terminal legs.</p>
3.Considerations for automatic placement	<p>Adjustment of mounting machine</p> <p>1.Excessive impact load should not be imposed on the products when mounting onto the PC boards.</p> <p>2.Mounting and soldering conditions should be checked beforehand.</p>	<p>1. When installing products, care should be taken not to apply distortion stress as it may deform the products.</p>
4.Soldering	<p>Wave soldering</p> <p>1.Please refer to the specifications in the catalog for a wave soldering.</p> <p>2.Do not immerse the entire Inductors in the flux during the soldering operation.</p> <p>Lead free soldering</p> <p>1.When using products with lead free soldering, we request to use them after confirming of adhesion, temperature of resistance to soldering heat, soldering etc sufficiently.</p> <p>Recommended conditions for using a soldering iron: Put the soldering iron on the land-pattern. Soldering iron's temperature - Below 350 °C Duration - 3 seconds or less The soldering iron should not directly touch the inductor.</p>	<p>1.If products are used beyond the range of the recommended conditions, heat stresses may deform the products, and consequently degrade the reliability of the products.</p>
5.Cleaning	<p>Cleaning conditions</p> <p>1.LA type, LH type</p> <p>Please do not do cleaning by a supersonic wave.</p>	<p>LA type, LH type</p> <p>1.If washing by supersonic waves, supersonic waves may deform products.</p>
6.Handling	<p>Handling</p> <p>1.Keep the inductors away from all magnets and magnetic objects.</p> <p>Mechanical considerations</p> <p>1.Please do not give the inductors any excessive mechanical shocks.</p> <p>2.LH type</p> <p>If inductors are dropped onto the floor or a hard surface they should not be used.</p> <p>Packing</p> <p>1.Please do not give the inductors any excessive mechanical shocks.</p> <p>In loading, please pay attention to handling indication mentioned in a packing box (a loading direction / number of maximum loading / fragile item).</p>	<p>1.There is a case that a characteristic varies with magnetic influence.</p> <p>1.There is a case to be damaged by a mechanical shock.</p> <p>2.LH type</p> <p>There is a case to be broken by a fall.</p> <p>1.There is a case that a lead route turns at by a fall or an excessive shock.</p>
7.Storage conditions	<p>Storage</p> <p>1.To maintain the solderability of terminal electrodes and to keep the packing material in good condition, temperature and humidity in the storage area should be controlled..</p> <p>•Recommended conditions</p> <p>Ambient temperature           0~40°C</p> <p>Humidity                        Below 70 % RH</p> <p>The ambient temperature must be kept below 30°C. Even under ideal storage conditions, solderability of products electrodes may decrease as time passes. For this reason, inductors should be used within one year from the time of delivery.</p> <p>In case of storage over 6 months, solderability shall be checked before actual usage.</p>	<p>1. Under a high temperature and humidity environment, problems such as reduced solderability caused by oxidation of terminal electrodes and deterioration of taping/package materials may take place.</p>