

## 系列：LHW

### 产品特点

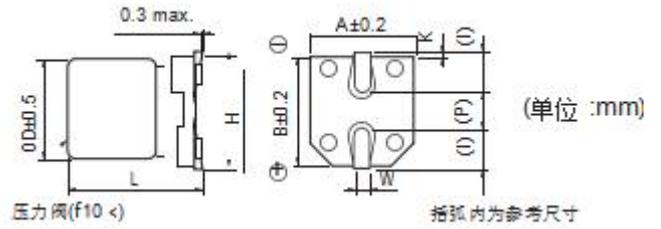
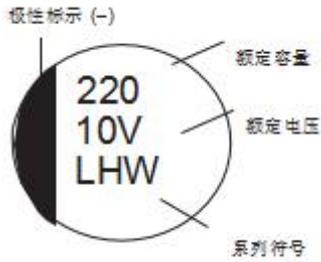
- 高温无铅回流焊产品
- 保证时间：125℃ 2000~3000 小时
- 适用于高温用途
- 高频低阻品
- 符合 RoHS 标准

项目 Items	特性 Characteristics								
工作温度范围 Operating Temperature Range	-55℃ ~+125℃								
额定电压范围 Rated Voltage Range	10V ~ 100V								
标称电容量范围 Nominal Capacitance Range	10 ~ 1000μF								
标称电容量允许偏差 Nominal Capacitance Tolerance	±20% (20℃, 120Hz)								
漏电流 Leakage Current	$I \leq 0.01C_R U_R$ or 3(μA), 取较大者 (2 分钟) $C_R$ : 标称电容量 (μF) $U_R$ : 额定电压 (V) $I \leq 0.01C_R U_R$ or 3(μA) Whichever is greater(at 20℃, after 2 minutes) $C_R$ : Nominal Capacitance (μF) $U_R$ : Rated voltages (V)								
损耗角正切 (tgδ) Dissipation Factor (Max) 20℃, 120Hz	$U_R$ (V)	10	16	25	35	50	63	80	100
	tgδ	0.30	0.23	0.18	0.16	0.16	0.12	0.12	0.10
耐久性 Load Life	+125℃施加额定电压 2000~3000 小时后，电容器应满足以下要求： $\Phi D = 6.3 * 7.7$ 为 2000 小时, $\Phi D \geq 8$ 为 3000 小时 $\Phi D = 6.3 * 7.7 : 2000H$ $\Phi D \geq 8 : 3000H$ After 1000~2000 hours application of rated voltage at 125℃, the capacitor shall meet the following requirement:								
	电容量变化率 Capacitance Change	±30%初始值以内 Within ±30% of the initial value							
	损耗角正切 Dissipation Factor	≤ 300%初始规定值 Not more than 300% of the initial specified value							
	漏电流 Leakage Current	≤ 初始规定值 Not more than the initial specified value							
高温贮存 Shelf Life	+125℃贮存 1000 小时后，电容器应满足以上耐久性要求 After storage for 1000 hours at +125℃, the capacitors shall meet the requirement of load life above								
低温特性 Low Temperature Stability 阻抗比 Impedance Ratio (120Hz)	$U_R$ (V)	10	16	25	35	50	63	80	100
	$Z(-25℃)/Z(+20℃)$	5	4	3	2	2	2	2	2
	$Z(-55℃)/Z(+20℃)$	12	8	6	4	4	4	4	4
耐焊接热 Resistance to Soldering Heat	在 250℃的条件下，电容器在热板上保持 30 秒，然后从热板上取出电容器，让其在室温下恢复，电容器应满足以下要求：The capacitors shall be kept on the hot plate maintained at 250℃ for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the following requirement.								
	电容量变化率 Capacitance Change	±10%初始值以内 Within ±10% of the initial value							
	损耗角正切 (tgδ) Dissipation Factor	≤ 初始规定值 Not more than the initial specified value							
	漏电流 Leakage Current	≤ 初始规定值 Not more than the initial specified value							
AEC-Q200	符合 AEC-Q200								

## 标示

## 外观尺寸

例：10V.DC 220uF LHW系列



φ D	L	A, B	H.	I	W	P	K
6.3	7.7±0.3	6.6	7.8	2.4	0.5~0.8	2.2	0.35 + 0.15 / - 0.20
8	10.5±0.5	8.3	10	3.4	0.8~1.1	3.1	0.70±0.20
8	12.5±0.5	8.3	10	3.4	0.8~1.1	3.1	0.70±0.20
10	10.5±0.5	10.3	12	3.5	0.8~1.1	4.5	0.70±0.20
10	12.5±0.5	10.3	12	3.5	0.8~1.1	4.5	0.70±0.20
12.5	13.5±0.5	13.5	15	4.7	1.1~1.4	4.4	0.70±0.20
12.5	16.5±0.5	13.5	15	4.7	1.1~1.4	4.4	0.70±0.20

特性一览表 1

额定电压 (V.DC)	静电容量 (±20%) (uF)	产品尺寸(mm)		电气特性			料号	最小包装 数量(PCS)
		φ D	L	额定纹波电流 (120Hz) (+125℃)	tan δ (120HZ) (+20℃)	Impedance (100KHZ) (+20℃)		
10	220	8	10.5	270	0.30	0.20	LHW1A221MF10500LP0	500
	330	8	10.5	270	0.30	0.20	LHW1A331MF10500LP0	500
	330	10	10.5	500	0.30	0.15	LHW1A331MG10500LP0	500
	470	10	10.5	500	0.30	0.15	LHW1A471MG10500LP0	500
16	100	6.3	7.7	197	0.23	0.40	LHW1C101ME07700LP0	1000
	100	8	10.5	270	0.23	0.20	LHW1C101MF10500LP0	500
	220	8	10.5	270	0.23	0.20	LHW1C221MF10500LP0	500
	330	10	10.5	500	0.23	0.15	LHW1C331MG10500LP0	500
	470	10	10.5	500	0.23	0.15	LHW1C471MG10500LP0	500
25	100	6.3	7.7	197	0.18	0.40	LHW1E101ME07700LP0	1000
	100	8	10.5	270	0.18	0.20	LHW1E101MF10500LP0	500
	220	8	10.5	270	0.18	0.20	LHW1E221MF10500LP0	500
	220	10	10.5	500	0.18	0.15	LHW1E221MG10500LP0	500
	330	10	10.5	500	0.18	0.15	LHW1E331MG10500LP0	500
	820	12.5	13.5	1700	0.18	0.060	LHW1E821MI13500LP0	200
	1000	12.5	16.5	1800	0.18	0.055	LHW1E102MI16500LP0	150
35	33	6.3	7.7	197	0.16	0.40	LHW1V330ME07700LP0	1000
	47	6.3	7.7	197	0.16	0.40	LHW1V470ME07700LP0	1000
	68	8	10.5	270	0.16	0.20	LHW1V680MF10500LP0	500

特性一览表 2

额定电压 (V.DC)	静电容量 (±20%) (uF)	产品尺寸(mm)		电气特性			料号	最小包装 数量 (PCS)
		φ D	L	额定纹波电流 (120Hz) (+125℃) (mA r.m.s)	tan δ (120HZ) (+20℃)	Impedance (100KHZ) (+20℃) (Ω)		
35	100	8	10.5	270	0.16	0.20	LHW1V101MF10500LP0	500
	220	10	10.5	500	0.16	0.15	LHW1V221MG10500LP0	500
	330	12.5	13.5	1700	0.16	0.060	LHW1V331MI13500LP0	200
	470	12.5	13.5	1700	0.16	0.060	LHW1V471MI13500LP0	200
	560	12.5	13.5	1700	0.16	0.060	LHW1V561MI13500LP0	200
50	22	6.3	7.7	197	0.16	0.50	LHW1H220ME07700LP0	1000
	33	6.3	7.7	197	0.16	0.50	LHW1H330ME07700LP0	1000
	33	8	10.5	270	0.16	0.25	LHW1H330MF10500LP0	500
	47	6.3	7.7	197	0.16	0.50	LHW1H470ME07700LP0	1000
	47	8	10.5	270	0.16	0.25	LHW1H470MF10500LP0	500
	100	10	10.5	500	0.16	0.20	LHW1H101MG10500LP0	500
	390	12.5	13.5	1300	0.16	0.15	LHW1H391MI13500LP0	200
63	10	6.3	7.7	60	0.12	2.00	LHW1J100ME0770LP0	1000
	22	8	10.5	100	0.12	0.70	LHW1J220MF10500LP0	500
	33	8	10.5	100	0.12	0.70	LHW1J330MF10500LP0	500
	33	10	10.5	170	0.12	0.50	LHW1J330MG10500LP0	500
	47	8	10.5	100	0.12	0.70	LHW1J470MF10500LP0	500
	47	10	10.5	170	0.12	0.50	LHW1J470MG10500LP0	500
	150	12.5	13.5	1000	0.12	0.40	LHW1J151MI13500LP0	200
	180	12.5	13.5	1000	0.12	0.40	LHW1J181MI13500LP0	200
	220	12.5	13.5	1000	0.12	0.40	LHW1J221MI13500LP0	200
80	10	8	10.5	70	0.12	0.75	LHW1K100MF10500LP0	500
	22	10	10.5	115	0.12	0.60	LHW1K220MG10500LP0	500
	33	8	10.5	70	0.12	0.75	LHW1K330MF10500LP0	500
	33	10	10.5	115	0.12	0.60	LHW1K330MG10500LP0	500
	47	10	10.5	115	0.12	0.60	LHW1K470MG10500LP0	500
	150	12.5	13.5	700	0.12	0.32	LHW1K151MI13500LP0	200
100	10	8	10.5	70	0.10	0.75	LHW2A100MF10500LP0	500
	22	8	10.5	70	0.10	0.75	LHW2A220MF10500LP0	500
	22	10	10.5	115	0.10	0.60	LHW2A220MG10500LP0	500
	33	10	10.5	115	0.10	0.60	LHW2A330MG10500LP0	500
	47	10	10.5	115	0.10	0.60	LHW2A470MG10500LP0	500
	82	12.5	13.5	700	0.10	0.32	LHW2A820MI13500LP0	200

■Frequency coefficient of ripple current

Frequency	50Hz	120Hz	300HZ	1KHz	≥ 10KHz
Coefficient	0.35	0.50	0.64	0.83	1.00