

外形图 Outline Drawing



应用

Applications

- ◆ 高性能直流滤波应用场合  
变频器、光伏逆变器、LED 路灯照明、  
工业和高端电源、车载充电器等
- ◆ High performance DC filtering  
applications  
Frequency converters, PV micro  
inverters, LED street lighting,  
Industrial and high-end power  
supplies, On board chargers (EV/HEV)



特征

- ◆ 超薄型，低高度，安全膜设计
- ◆ 低等效串联电阻，高纹波电流处理能力
- ◆ 低电感
- ◆ 寿命时间长
- ◆ 自愈特性
- ◆ 树脂灌封

Features

- ◆ Slim line, Low building height,  
segmented metalized-film design
- ◆ Low ESR, high ripple current  
handling capabilities
- ◆ Low ESL
- ◆ Long Lifetime
- ◆ Self-healing property  
Filled with resin



新能源电容产品编码规则 (10 位)

The 10 digits part number is formed as follow.

型号代码:

Model type code:

DL\*\*\*:DC-Link 电容器 (DC-link capacitor)

1 2 3 4 5 6 7 8 9 10

DL	3K0	174	01
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特征码或版本: 01-99

标称容量: 174 →  $17 \times 10^4 \text{pF}$  →  $0.17 \mu\text{F}$

额定电压: 3K0 → 3000V

DL: DC-link 电容器

范例: DC-Link 电容器 3000V0.17  $\mu\text{F}$

编码: DL3K0174\*\*



技术要求  
Specifications

引用标准 Reference Standard	GB/T17702 IEC61071			
气候类别 Climatic Category	40/85/56;40/105/56			
工作温度范围 Operating Temperature Range	-40℃~105℃ ( $\theta_{hs} \leq 105^\circ\text{C}$ ) $\theta_{hs} = 85^\circ\text{C} \sim 105^\circ\text{C}$ : decreasing factor 1.5% per℃ for $U_N$			
额定电压 ( $U_N$ ) Rated Voltage 85℃	500VAC	1000VAC	2000VAC	3000VAC
容量范围 ( $C_N$ ) Capacitance Range ( $C_N$ )	0.01 $\mu\text{F}$ ~ 10 $\mu\text{F}$			
容量偏差 Capacitance Tolerance	$\pm 5\%$ (J) 、 $\pm 10\%$ (K)			
耐电压 Voltage Proof	1.5 $U_N$ (10S, $20 \pm 5^\circ\text{C}$ )			
绝缘电阻 Insulation Resistance ( $R \times C_N$ )	$\geq 10,000\text{S}$ (@20℃, 500Vdc, 1min)			
自感 (Ls) Self Inductance (Ls)	< 1nH per mm of lead spacing			
频率 (f) Frequency (f)	10KHz~200KHz			
最大峰值电流 ( $\hat{I}$ ) Maximum peak current ( $\hat{I}$ )	$\hat{I} = C_N * dv/dt$			
预期寿命 Expected Lifetime	100,000 hours @ $U_N$ , $\theta_{hs} = 70^\circ\text{C}$			



## 技术参数 Technical data

Un400Vdc Urms 250Vac							
$C_n$	L	D	Outout	dV/dt	Irms	ESR	Part Number
$\mu F$	mm	mm	M	V/ $\mu s$	A	m $\Omega$	
20	40	44	M6	70	27	3.5	DL40020601
25	50	47	M6	60	32	3.0	DL40025601
30	50	50	M6	60	37	2.8	DL40030601
40	50	58	M6	60	46	2.5	DL40040601
50	50	64	M6	60	54	2.2	DL40050601
60	60	57	M6	60	46	2.9	DL40060601
80	60	66	M6	60	56	2.0	DL40080601
100	60	74	M6	60	66	1.8	DL40010701
150	64	90	M8	30	90	1.6	DL40015701
200	64	104	M8	30	100	1.2	DL40020701

Un800Vdc Urms 400Vac							
$C_n$	L	D	Outout	dV/dt	Irms	ESR	Part Number
$\mu F$	mm	mm	M	V/ $\mu s$	A	m $\Omega$	
10	40	42	M6	80	25	4.5	DL80010601
15	50	44	M6	70	32	3.3	DL80015601
20	50	52	M6	70	40	2.8	DL80020601
25	50	58	M6	70	45	2.5	DL80025601
30	50	63	M6	70	50	2.1	DL80030601
40	60	63	M6	50	48	3.0	DL80040601
50	60	70	M6	50	55	2.6	DL80050601
60	60	76	M6	50	65	2.3	DL80060601
80	64	88	M8	50	80	2.0	DL80080601
100	64	98	M8	50	95	1.8	DL80010701



Un1000Vdc Urms 500Vac							
$C_n$	L	D	Outout	dV/dt	I <sub>rms</sub>	ESR	Part Number
$\mu F$	mm	mm	M	V/ $\mu s$	A	m $\Omega$	
5	50	41	M6	120	23	5.4	DL1K050501
10	50	58	M6	120	38	3.2	DL1K010601
15	50	70	M8	120	52	2.5	DL1K015601
15	64	58	M6	80	38	2.9	DL1K015602
20	64	66	M6	80	47	3.1	DL1K020601
25	64	74	M6	80	55	2.7	DL1K025601
30	64	81	M8	80	65	2.4	DL1K030601
40	64	93	M8	80	78	2.1	DL1K040601
50	64	104	M8	80	90	2.0	DL1K050601

Un1200Vdc Urms 520Vac							
$C_n$	L	D	Outout	dV/dt	I <sub>rms</sub>	ESR	Part Number
$\mu F$	mm	mm	M	V/ $\mu s$	A	m $\Omega$	
5	40	44	M6	120	23	5.0	DL1K250501
10	50	58	M6	100	38	3.3	DL1K210601
15	50	70	M6	100	52	2.6	DL1K215601
20	60	66	M6	80	45	3.3	DL1K220601
25	60	74	M6	80	55	3.0	DL1K225601
30	64	81	M6	80	65	2.6	DL1K230601
40	64	93	M8	80	78	2.3	DL1K240601
50	64	104	M8	80	90	2.0	DL1K250601

\*以上仅列出常规尺寸，可依客户要求定制谐振电容。

