

RS 长寿命高频低阻抗 (CD287L)

- 105°C, 长寿命, 4000-10000 小时。Long life of 4000-10000 hrs at 105°C.
- 高频 低阻抗 高纹波电流。High frequency, low impedance, high ripple current.
- 特别适用于 LED 驱动电路, 符合 RoHS。Specially designed for LED driver, RoHS Compliant.

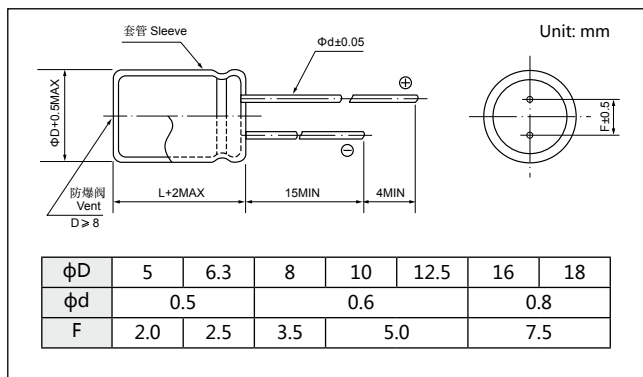


主要技术性能 Specifications

项目 Item	特性 Performance Characteristics																											
工作温度范围 Operating Temperature Range	-40~+105°C																											
额定电压范围 Rated Voltage Range	6.3~100V																											
标称容量范围 Nominal Capacitance Range	1~15000µF																											
标称容量允许偏差 Capacitance Tolerance	±20%(+20°C, 120Hz)																											
漏电流 Leakage Current	$I \leq 0.01CV$ 或 $3\mu A$ (2 分钟) 取较大值 (after 2 minutes, Whichever is greater)																											
损耗角正切值 (tgδ) Dissipation Factor (+20°C, 120Hz)	<table border="1"> <tr> <td>U_R(V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>tgδ</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.09</td> <td>0.08</td> </tr> </table> <p>容量大于 1000µF 者, 每增加 1000µF, 其损耗角正切值增加 0.02。 When nominal capacitance exceeds 1000µF, add 0.02 to the value above for each 1000µF increase.</p>	U _R (V)	6.3	10	16	25	35	50	63	100	tgδ	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08									
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温度特性 Temperature Characteristics (Impedance ratio at 120Hz)	<table border="1"> <tr> <td>U_R(V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>Z-25°C /+20°C</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z-40°C /+20°C</td> <td>8</td> <td>6</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> </table>	U _R (V)	6.3	10	16	25	35	50	63	100	Z-25°C /+20°C	4	3	2	2	2	2	2	2	Z-40°C /+20°C	8	6	4	3	3	3	3	3
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耐久性 Load Life	<p>+105°C施加带额定纹波电流的额定电压对应规定时间, 恢复 24 小时后: After applying rated voltage with specified ripple current for specified time at +105°C and then resumed 24 hours: 电容量变化率 Capacitance change: ±25% 初始测量值以内 ±25% of the initial measured value 漏 电 流 Leakage current: ≤初始规定值 ≤ the initial specified value 损耗角正切值 Dissipation factor: ≤ 2 倍初始规定值 ≤ 200% of the initial specified value</p> <table border="1"> <tr> <td rowspan="2">Case Size</td> <td colspan="2">Life Time(hrs)</td> </tr> <tr> <td>6.3 ~10WV</td> <td>16 ~100WV</td> </tr> <tr> <td>ΦD ≤ 6.3</td> <td>4000</td> <td>5000</td> </tr> <tr> <td>ΦD=8,10</td> <td>6000</td> <td>7000</td> </tr> <tr> <td>ΦD ≥ 12.5</td> <td>8000</td> <td>10000</td> </tr> </table>	Case Size	Life Time(hrs)		6.3 ~10WV	16 ~100WV	ΦD ≤ 6.3	4000	5000	ΦD=8,10	6000	7000	ΦD ≥ 12.5	8000	10000													
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高温贮存 Shelf Life	<p>+105°C, 1000 小时贮存后, 恢复 24 小时后: After storage for 1000 hours at +105°C, and then resumed 24 hours 电容量变化率 Capacitance change: ±25% 初始测量值以内 ±25% of the initial measured value 漏 电 流 Leakage current: ≤ 2 倍初始规定值 ≤ 200% of the initial specified value 损耗角正切值 Dissipation factor: ≤ 2 倍初始规定值 ≤ 200% of the initial specified value</p>																											

Low Impedance

外形图及尺寸 Diagram of Dimensions



纹波电流修正系数 Multiplier for Ripple Current

频率系数 Frequency coefficient		120	1K	10K	100K ≤
Coefficient	Frequency(Hz)				
	1~10µF	0.42	0.60	0.80	1.00
	22~33µF	0.55	0.75	0.90	1.00
	47~330µF	0.70	0.85	0.95	1.00
	470~1000µF	0.75	0.90	0.98	1.00
2200~15000µF	0.80	0.95	1.00	1.00	
温度系数 Temperature coefficient					
Temperature (°C)		+70	+85	+105	
coefficient		1.96	1.68	1.0	

额定值标准 *Standard Size*

Rated Voltage (V _{dc})	Capacitance (μF)	Size ΦD×L (mm)	Rated ripple current (mArms) 105°C/100KHz	Impedance (Ω MAX)	
				20°C, 100KHz	-10°C, 100KHz
6.3 (0J)	100	5×11	150	0.90	3.6
	220	6.3×11	250	0.40	1.6
	330	6.3×11	250	0.40	1.6
	470	8×11.5	400	0.25	1.0
	1000	10×12.5	580	0.16	0.65
	2200	12.5×20	1300	0.062	0.21
	3300	12.5×20	1300	0.062	0.21
	4700	16×25	1850	0.034	0.096
	6800	16×25	1850	0.034	0.096
	10000	16×31.5	2000	0.029	0.087
	15000	18×35.5	2200	0.025	0.058
10 (1A)	100	5×11	150	0.90	3.6
	220	6.3×11	250	0.40	1.6
	330	8×11.5	400	0.25	1.0
	470	8×11.5	400	0.25	1.0
	1000	10×16	770	0.12	0.46
	2200	12.5×20	1300	0.062	0.21
	3300	12.5×25	1650	0.048	0.16
	4700	16×25	1850	0.034	0.096
	6800	16×31.5	2000	0.029	0.087
	10000	18×35.5	2200	0.025	0.058
16 (1C)	47	5×11	150	0.90	3.6
	100	6.3×11	250	0.40	1.6
	220	8×11.5	400	0.25	1.0
	330	8×11.5	400	0.25	1.0
	470	10×12.5	580	0.16	0.65
	1000	10×20	1050	0.078	0.30
	2200	12.5×25	1650	0.048	0.16
	3300	16×25	1850	0.034	0.096
	4700	16×31.5	2000	0.029	0.087
6800	18×35.5	2200	0.025	0.058	
25 (1E)	33	5×11	150	0.90	3.6
	47	5×11	150	0.90	3.6
	100	6.3×11	250	0.40	1.6
	220	8×11.5	400	0.25	1.0
	330	10×12.5	580	0.16	0.65
	470	10×16	770	0.12	0.46
	1000	12.5×20	1300	0.062	0.21
	2200	16×25	1850	0.034	0.096
	3300	16×31.5	2000	0.029	0.087
4700	18×35.5	2200	0.025	0.058	
35 (1V)	33	5×11	150	0.90	3.6
	47	6.3×11	250	0.40	1.6
	100	8×11.5	400	0.25	1.0
	220	10×12.5	580	0.16	0.65
	330	10×16	770	0.12	0.46
	470	10×20	1050	0.078	0.30
	1000	12.5×25	1650	0.048	0.16
	2200	16×31.5	2000	0.029	0.087
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Rated Voltage (V _{dc})	Capacitance (μF)	Size ΦD×L (mm)	Rated ripple current (mArms) 105°C/100KHz	Impedance (Ω MAX)	
				20°C, 100KHz	-10°C, 100KHz
50 (1H)	1	5×11	30	4.0	8.0
	2.2	5×11	43	2.5	6.0
	3.3	5×11	53	2.2	5.6
	4.7	5×11	88	1.9	5.0
	10	5×11	100	1.5	4.0
	22	5×11	150	0.90	3.6
	33	6.3×11	250	0.40	1.6
	47	6.3×11	250	0.40	1.6
	100	8×11.5	400	0.25	1.0
	220	10×16	770	0.12	0.46
	330	10×20	1050	0.078	0.30
	470	12.5×20	1300	0.062	0.21
	1000	16×25	1850	0.034	0.096
	2200	18×35.5	2200	0.025	0.058
63 (1J)	10	5×11	87	2.3	9.3
	22	6.3×11	140	1.3	5.2
	33	6.3×11	140	1.2	5.0
	47	8×11.5	210	0.63	2.8
	100	10×12.5	300	0.43	1.8
	220	10×20	520	0.21	0.84
	330	12.5×20	660	0.16	0.64
	470	12.5×25	750	0.12	0.45
	1000	16×31.5	1390	0.054	0.20
	100 (2A)	1	5×11	20	4.5
2.2		5×11	30	3.0	13.0
3.3		5×11	40	2.7	11.0
4.7		5×11	65	2.5	10.0
10		6.3×11	140	1.2	5.0
22		8×11.5	160	0.63	2.8
33		10×12.5	230	0.43	1.8
47		10×16	290	0.31	1.5
100		12.5×20	430	0.16	0.64
220		16×25	900	0.073	0.27
330		16×25	900	0.073	0.27

可根据客户需要定制产品 Customer products are available on request.