

RZ (CD287Z)

Features

- Long life of 6000-10000 hours at 105°C .
- Miniaturized, extremely low impedance.
- Especially designed for LED driver.
- RoHS Compliant.

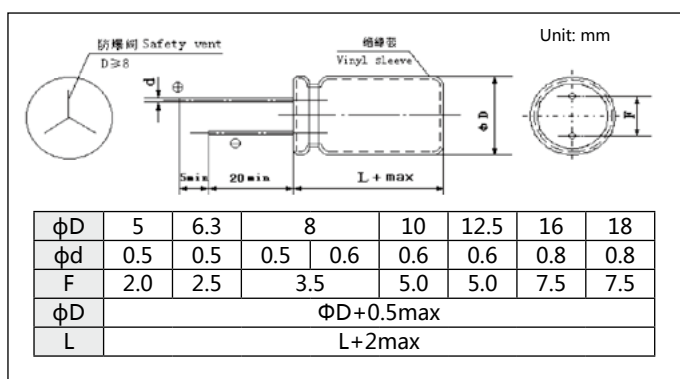


Specifications

Item	Performance Characteristics																											
Operating Temperature Range	-40~+105°C																											
Rated Voltage Range	6.3~50V																											
Nominal Capacitance Range	22~10000µF																											
Capacitance Tolerance	±20%(+20°C ,120Hz)																											
Leakage Current	$I \leq 0.01CV$ or $3\mu A$ (after 2 minutes , Whichever is greater)																											
Dissipation Factor ($tg\delta$,+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>$tg\delta$</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>	$U_R(V)$	6.3	10	16	25	35	50	63	100	$tg\delta$	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08									
	$U_R(V)$	6.3	10	16	25	35	50	63	100																			
$tg\delta$	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08																				
When rated capacitance is over 1000µF, $tg\delta$ shall be added 0.02 to the listed value with increase of every 1000µF.																												
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
	$U_R(V)$	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																				
Load Life	After applying rated voltage with specified ripple current for specified time at +105°C and then resumed 24 hours: Capacitance change : ±25% (6.3,10V:±30%) of the initial measured value Leakage current : ≤ the initial specified value Dissipation factor: ≤ 200% of the Initial specified value																											
	<table border="1"> <tr> <th>Case Size</th> <th>Life Time(hrs)</th> </tr> <tr> <td>ΦD ≤ 6.3</td> <td>6000</td> </tr> <tr> <td>Φ8 & Φ10×12</td> <td>8000</td> </tr> <tr> <td>Φ10×16 to Φ18</td> <td>10000</td> </tr> </table>	Case Size	Life Time(hrs)	ΦD ≤ 6.3	6000	Φ8 & Φ10×12	8000	Φ10×16 to Φ18	10000																			
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Shelf Life	After storage for 1000 hours at +105°C , and then resumed 24 hours: Capacitance change : ±25% (6.3,10V:±30%) of the initial measured value Leakage current : ≤ 200% of the initial specified value Dissipation factor: ≤ 200% of the initial specified value																											

LED & Low Impedance

Diagram of Dimensions



Multiplier for Ripple Current

Frequency coefficient		120	1K	10K	100K
Coefficient	22~180µF	0.40	0.75	0.90	1.00
	220~560µF	0.50	0.85	0.94	1.00
	680~1800µF	0.60	0.87	0.95	1.00
	2200~3900µF	0.75	0.90	0.95	1.00
	4700~10000µF	0.85	0.95	0.98	1.00

Standard Size

Rated Voltage (V _{dc})	Capacitance (μF)	Size ΦD×L (mm)	tanδ	Impedance (Ω)MAX 20°C/100KHz	Rated ripple current (mA _{rms}) 105°C/100KHz
6.3 (0J)	220	5×11	0.22	0.22	345
	470	6.3×11	0.22	0.094	540
	820	8×11.5	0.22	0.056	945
	1200	8×16	0.22	0.045	1250
	1200	10×12.5	0.22	0.039	1330
	1500	8×20	0.22	0.029	1500
	1800	10×16	0.22	0.028	1760
	2200	10×20	0.24	0.020	1960
	2700	10×25	0.24	0.018	2250
	3900	12.5×20	0.26	0.017	2480
	4700	12.5×25	0.28	0.015	2900
	5600	12.5×30	0.30	0.013	3450
	6800	12.5×35	0.32	0.012	3570
	6800	16×20	0.32	0.015	3250
	8200	16×25	0.36	0.013	3630
10000	18×25	0.40	0.012	3650	
10 (1A)	150	5×11	0.19	0.22	345
	330	6.3×11	0.19	0.094	540
	680	8×11.5	0.19	0.056	945
	1000	8×16	0.19	0.045	1250
	1000	10×12.5	0.19	0.039	1330
	1500	8×20	0.19	0.029	1500
	1500	10×16	0.19	0.028	1760
	1800	10×20	0.19	0.020	1960
	2200	10×25	0.21	0.018	2250
	3300	12.5×20	0.23	0.017	2480
	3900	12.5×25	0.23	0.015	2900
	4700	12.5×30	0.25	0.013	3450
	4700	16×20	0.25	0.015	3250
	5600	12.5×35	0.27	0.012	3570
	6800	16×25	0.29	0.013	3630
8200	18×25	0.33	0.012	3650	
16 (1C)	100	5×11	0.16	0.22	345
	220	6.3×11	0.16	0.094	540
	470	8×11.5	0.16	0.056	945
	680	8×16	0.16	0.045	1250
	680	10×12.5	0.16	0.039	1330
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	1000	10×16	0.16	0.028	1760
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	3300	16×20	0.20	0.015	3250
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	4700	16×25	0.22	0.013	3630
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Rated Voltage (V _{dc})	Capacitance (μF)	Size ΦD×L (mm)	tanδ	Impedance (Ω)MAX 20°C/100KHz	Rated ripple current (mA _{rms}) 105°C/100KHz	
25 (1E)	68	5×11	0.14	0.22	345	
	150	6.3×11.5	0.14	0.094	540	
	330	8×11.5	0.14	0.056	945	
	390	8×16	0.14	0.045	1250	
	470	10×12.5	0.14	0.039	1330	
	560	8×20	0.14	0.029	1500	
	680	10×16	0.14	0.028	1760	
	820	10×20	0.14	0.020	1960	
	1000	10×25	0.14	0.018	2250	
	1500	12.5×20	0.14	0.017	2480	
	1800	12.5×25	0.14	0.015	2900	
	2200	12.5×30	0.16	0.013	3450	
	2200	16×20	0.16	0.015	3250	
	2700	12.5×35	0.16	0.012	3570	
	3300	16×25	0.18	0.013	3630	
	3900	18×25	0.18	0.012	3650	
	35 (1V)	47	5×11	0.12	0.22	345
		100	6.3×11	0.12	0.094	540
220		8×16	0.12	0.056	945	
270		8×20	0.12	0.045	1250	
330		10×12.5	0.12	0.039	1330	
390		8×20	0.12	0.029	1500	
470		10×16	0.12	0.028	1760	
560		10×20	0.12	0.020	1960	
680		10×25	0.12	0.018	2250	
1000		12.5×20	0.12	0.017	2480	
1200		12.5×25	0.12	0.015	2900	
1500		12.5×30	0.12	0.013	3450	
1500		16×20	0.12	0.015	3250	
1800		12.5×35	0.12	0.012	3570	
2200		16×25	0.14	0.013	3630	
2700	18×25	0.14	0.012	3650		
50 (1H)	22	5×11	0.10	0.34	238	
	56	6.3×11	0.10	0.14	385	
	100	8×11.5	0.10	0.074	724	
	120	8×16	0.10	0.061	950	
	150	10×12.5	0.10	0.061	979	
	180	8×20	0.10	0.046	1190	
	220	10×16	0.10	0.042	1370	
	270	10×20	0.10	0.030	1580	
	330	10×25	0.10	0.028	1870	
	470	12.5×20	0.10	0.027	2050	
	560	12.5×25	0.10	0.023	2410	
	680	12.5×30	0.10	0.021	2860	
	820	16×20	0.10	0.019	2960	
	820	16×20	0.10	0.023	2730	
	1000	16×25	0.10	0.021	3010	
1500	18×25	0.10	0.019	3290		

LED & Low Impedance