

# RM 105°C (CD263L)

- ⊙ Low Impedance, 105°C Load life of 3000h ( ≤ Φ8 Load life of 2000 hours; ≥ Φ10 Load life of 3000~5000 hours)
- ⊙ Used in switching power supply .
- ⊙ Adapted to the ROHS directive (2002/95/EC).

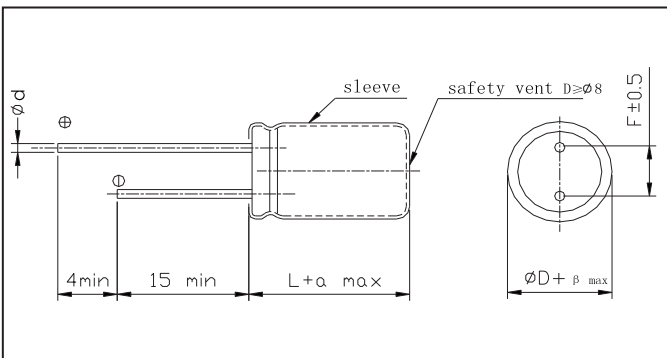


## Specifications

Item	Performance Characteristics																										
Operating temperature range	-40 ~ +105°C	-25 ~ +105°C																									
Rated voltage range	6.3 ~ 100V	160 ~ 450V																									
Nominal capacitance range	0.47~15000μF																										
Capacitance tolerance	± 20% (120Hz, +20°C)																										
Leakage current	I ≤ 0.02CV (μA) 4μA (at 20°C, after 2 minutes) (Whichever is greater)	I ≤ 0.03CV (μA) (1 minute)																									
(tg δ) Dissipation factor (+20°C, 120Hz)	<table border="1"> <tr> <td>U<sub>R</sub> (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 δ</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>0.08</td> <td>0.08</td> </tr> </table>									U <sub>R</sub> (V)	6.3	10	16	25	35	50	63	100	tg δ	0.22	0.19	0.16	0.14	0.12	0.10	0.08	0.08
	U <sub>R</sub> (V)	6.3	10	16	25	35	50	63	100																		
	tg δ	0.22	0.19	0.16	0.14	0.12	0.10	0.08	0.08																		
<table border="1"> <tr> <td>U<sub>R</sub> (V)</td> <td>160</td> <td>200</td> <td>250</td> <td>400</td> <td>450</td> </tr> <tr> <td>tg δ</td> <td>0.20</td> <td>0.20</td> <td>0.20</td> <td>0.25</td> <td>0.25</td> </tr> </table>									U <sub>R</sub> (V)	160	200	250	400	450	tg δ	0.20	0.20	0.20	0.25	0.25							
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tg δ	0.20	0.20	0.20	0.25	0.25																						
For capacitance value >1000μF, add 0.02 per another 1000μF																											
Temperature Characteristics (Impedance ratio at 120Hz)	<table border="1"> <tr> <td>U<sub>R</sub> (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-40°C/Z+20°C</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> </tr> </table>									U <sub>R</sub> (V)	6.3	10	16	25	35	50	63	100	Z-40°C/Z+20°C	4	4	3	3	3	2	2	2
	U <sub>R</sub> (V)	6.3	10	16	25	35	50	63	100																		
	Z-40°C/Z+20°C	4	4	3	3	3	2	2	2																		
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Z-25°C/Z+20°C	4	4	5	5	5																						
For capacitance value >1000μF, add 0.02 per another 1000μF																											
Load life	After applying rated voltage for Load life of 3000h ( ≤ Φ 8 Load life of 2000 hours; ≥ Φ 10 Load life of 3000-5000 hours) at +105°C and then resumed 16 hours: Capacitance change : ±20% Initial measured value Leakage current : ≤ Initial specified value Dissipation factor : ≤ 2 times Initial specified value																										
Shelf life	After storage for 1000 hours at +105°C and then resumed 16 hours Capacitance change : ±20% Initial measured value Leakage current : ≤ 2 times Initial specified value Dissipation factor : ≤ 2 times Initial specified value																										

## Case size table

Unit: mm



D	5	6	8	10	12	13	16	18	19	22
F	2.0	2.5	3.5	5.0		7.5				10
d	0.5		0.5-0.6		0.6		0.8			
αMAX	(L<20) 2.0								(D<20) 0.5	
	(L≥20) 2.0								(D≥20) 1.0	
						βMAX				

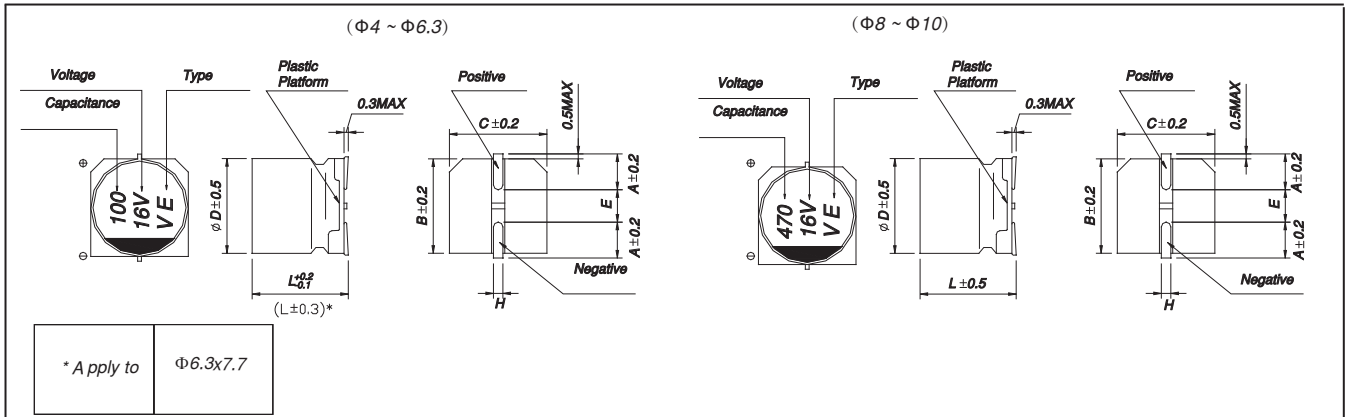
∅D × L (mm)  
Impedance (20 °C / 100KHz)  
Rated Ripple Current (+105 °C, 120Hz)

**Dimensions**

Cap. (μF) / U <sub>R</sub> (code) / Item Code		6.3V(0J)			10v(1A)			16v(1C)			25V(1E)		
		case size ∅D×L	Impedance (ΩMAX)	Ripple mArms	case size ∅D×L	Impedance (ΩMAX)	Ripple mArms	case size ∅D×L	Impedance (ΩMAX)	Ripple mArms	case size ∅D×L	Impedance (ΩMAX)	Ripple mArms
4.7	4R7									5x11	3	15	
10	100						5x11	3.0	23	5x11	2.5	45	
22	220	5x11	3.0	25	5x11	2.5	30	5x11	2.5	42	5x11	1.9	70
33	330	5x11	2.2	40	5x11	1.8	50	5x11	1.8	75	5x11	1.30	95
47	470	5x11	1.8	65	5x11	1.2	85	6x11	1.30	92	8x12	0.84	125
100	101	5x11	1.40	99	6x11	0.84	135	8x12	0.55	175	8x12	0.39	245
150	151	6x12	0.78	155	8x12	0.55	185	8x12	0.37	260	8x16	0.26	320
220	221	8x12	0.48	205	8x12	0.38	270	8x16	0.26	335	8x16	0.18	455
330	331	8x12	0.32	310	8x16	0.26	350	8x16	0.18	455	8x20	0.13	610
470	471	8x16	0.22	435	8x16	0.19	475	8x16	0.14	615	10x20	0.10	870
								10x16	0.12	645			
560	561	8x16	0.19	480	8x20	0.16	590	12x20	0.12	770	10x20	0.084	990
680	681	8x16	0.16	605	8x20	0.13	660	10x20	0.10	845	12x20	0.072	1180
820	821	8x16	0.13	670	12x20	0.11	835	10x20	0.084	1030	12x20	0.059	1210
											12x25	0.058	1285
1000	102	8x16	0.16	820	10x16	0.12	915	10x20	0.081	1210	12x25	0.048	1430
		8x20	0.12	845	10x20	0.096	935	12x20	0.072	1235			
1200	122	10x16	0.10	895	10x20	0.078	1120	12x20	0.060	1250	16x25	0.043	1550
								12x25	0.058	1295			
1500	152	10x20	0.084	1090	12x20	0.072	1290	12x25	0.048	1490	16x25	0.035	1780
								13x25	0.048	1510			
2200	222	12x20	0.066	1320	12x20	0.045	1530	13x25	0.034	1860	16x30	0.029	2120
2700	272	12x25	0.051	1430	12x25	0.036	1740	13x31	0.031	1990	16x30	0.027	2220
3300	332	12x25	0.045	1530	12x25	0.032	1960	16x30	0.028	2160	16x35	0.025	2410
3900	392	13x25	0.037	1710	13x31	0.030	2120	16x30	0.027	2220	18x35	0.023	2530
4700	472	16x25	0.034	1890	16x30	0.028	2170	16x35	0.025	2410	18(19)x35		2660
		16x30	0.032	1910							18(19)x35	0.022	2695
5600	562	16x30	0.031	2040	16x30	0.026	2340	16x35	0.023	2530			
								18x35	0.024	2565			
6800	682	16x35	0.029	2130	16x30	0.024	2410	18x35	0.022	2610	19x35	0.020	
											19x40	0.019	
8200	822	16x35	0.027	2200	16x35	0.023	2530	18(19)x35	0.021	2730			
10000	103	16x35	0.025	2470	18(19)x35	0.021	2730	18(19)x40	0.020				
12000	123	18(19)x35	0.023	2530									
15000	153	18(19)x40	0.022	2660	18(19)x35	0.018							
					18(19)x40	0.017							

C <sub>R</sub> (μF) / U <sub>R</sub> (code) / Item Code		35V(1V)			50V(1H)			63V(1J)			100V(2A)		
		case size ∅D×L	Impedance (ΩMAX)	Ripple mArms	case size ∅D×L	Impedance (ΩMAX)	Ripple mArms	case size ∅D×L	Impedance (ΩMAX)	Ripple mArms	case size ∅D×L	Impedance (ΩMAX)	Ripple mArms
0.47	R47				5x11	31.0	11				5x11	43.0	8
1	010				5x11	14.0	18				5x11	17.0	13
2.2	2R2				5x11	6.50	27				5x11	6.60	21
3.3	3R3				5x11	4.60	33				5x11	4.10	27
4.7	4R7				5x11	3.10	40	6x11	2.8	37	6x11	2.80	34
6.8	6R8				5x11	2.50	45	6x11	2.1	49	6x11	1.90	41
10	100				6x11	2.00	57	6x11	1.60	67	6x11	1.20	52
12	120				6x11	1.70	62	6x11	1.40	72	6x11	1.00	57
15	150				6x11	1.30	72	8x12	0.10	92	8x12	0.81	65
18	180				6x11	1.10	79	8x12	0.95	100	8x12	0.67	73
22	220	6x11	1.30	125	6x11	0.91	100	8x12	0.78	110	8x12	0.55	122
27	270	6x11	0.78	140	6x11	0.74	115	8x12	0.64	130	8x16	0.47	146
33	330	6x11	0.54	160	8x12	0.60	135	8x16	0.52	170	8x16	0.38	169
39	390	6x11	0.45	180	8x12	0.50	150	8x16	0.45	190	8x16	0.33	202
47	470	6x11	0.37	230	8x12	0.42	195	8x16	0.37	215	10x16	0.28	252
56	560	6x11	0.31	265	8x16	0.35	220	8x20	0.31	275	10x20	0.24	274
68	680	8x16	0.26	305	8x16	0.28	255	8x20	0.26	315	10x20	0.21	326
82	820	8x20	0.22	370	8x20	0.22	320	10x16	0.22	385	10x25	0.18	386
100	101	8x20	0.18	415	10x20	0.18	410	10x20	0.18	495	12x20	0.15	438
220	221	10x16	0.16	810	12x25	0.098	760	12x20	0.094	835	16x25	0.087	730
270	271	10x20	0.13	955	12x25	0.085	900	13x25	0.081	1000	16x25	0.072	843
330	331	12x20	0.11	1130	12x20	0.072	995	13x25	0.072	1090	16x25	0.062	1160
390	391	12x20	0.096	1160	13x25	0.053	1120	13x30	0.059	1260	16x31	0.053	1340
470	471	12x25	0.084	1370	13x31	0.048	1190	13x30	0.052	1420	16x35	0.047	1530
560	561	12x30	0.072	1490	16x30	0.040	1360	16x25	0.047	1580	18(19)x35	0.041	1680
680	681	13x25	0.059	1710	16x30	0.036	1530	16x30	0.043	1700	18(19)x35	0.036	1910
820	821	13x30	0.048	1920	16x35	0.033	1700	16x35	0.040	1880			
1000	102	13x30	0.042	2120	16x35	0.030	1830	18(19)x35	0.037	2050			
1200	122	16x25	0.035	2220	18(19)x35	0.028	1990	18(19)x40	0.034	2210			
1500	152	18x35	0.024	2410	18(19)x40	0.026	2170	18(19)x40	0.031				
1800	182	18(19)x40	0.022	2610	18(19)x40	0.025	2210	18(19)x40	0.030				
2200	222	18(19)x40	0.021	2730	18(19)x40	0.024	2300	22x40	0.028				

**■ Dimensions**



(mm)

	4 × 5.4	5 × 5.4	6.3 × 5.4	6.3 × 7.7	8 × 10.5	10 × 10.5
A	1.8	2.1	2.4	2.4	2.9	3.2
B	4.3	5.3	6.6	6.6	8.3	10.3
C	4.3	5.3	6.6	6.6	8.3	10.3
E	1.0	1.3	2.2	2.2	3.1	4.5
L	5.4	5.4	5.4	7.7	10	10
H	0.5 ~ 0.8			0.8 ~ 1.1		

◇ Nominal capacitance, rated voltage, rated ripple current and case size table

V μF	4		6.3		10		16		25		35		50		63		100	
	DxLmm	I~ mA	DxLmm	I~ mA	DxLmm	I~ mA	DxLmm	I~ mA	DxLmm	I~ mA	DxLmm	I~ mA	DxLmm	I~ mA	DxLmm	I~ mA	DxLmm	I~ mA
0.1													4x5.4	1.0	4x5.4	1.0		
0.22													4x5.4	2.0	4x5.4	2.3		
0.33													4x5.4	2.8	4x5.4	3.5		
0.47													4x5.4	4.0	4x5.4	5.0		
1.0													4x5.4	8.4	4x5.4	10		
2.2													4x5.4	13	4x5.4	15		
3.3													4x5.4	17	4x5.4	20	6.3x7.7	28
4.7									4x5.4	16	4x5.4	18	4x5.4	18	4x5.4	23	6.3x7.7	35
													5x5.4	20				
10							4x5.4	23	4x5.4	24	4x5.4	24	5x5.4	30	6.3x5.4	34	6.3x7.7	50
													5x5.4	27	5x5.4	29	6.3x5.4	33
22			4x5.4	28	4x5.4	30	4x5.4	30	5x5.4	38	5x5.4	39	6.3x5.4	43	6.3x7.7	70	8x10.5	120
33	4x5.4	28	4x5.4	34	4x5.4	34	5x5.4	44	5x5.4	46	6.3x5.4	53	6.3x7.7	85	8x10.5	160	10x10.5	190
			5x5.4	37	5x5.4	41	6.3x5.4	49	6.3x5.4	52								
47	4x5.4	33	4x5.4	40	5x5.4	47	5x5.4	52	6.3x5.4	60	6.3x7.7	70	6.3x7.7	90	8x10.5	170		
			5x5.4	45	6.3x5.4	52	6.3x5.4	58					8x10.5	140				
56	5x5.4	42	5x5.4	46	5x5.4	50	5x5.4	57	6.3x7.7	65	6.3x7.7	80	8x10.5	150	8x10.5	230		
			6.3x5.4	52	6.3x5.4	57	6.3x5.4	63										
100	5x5.4	56	5x5.4	47	5x5.4	54	6.3x5.4	86	6.3x7.7	130	6.3x7.7	120	8x10.5	181	8x10.5	280		
			6.3x5.4	70	6.3x5.4	76					8x10.5	175	10x10.5	195				
150	6.3x5.4	79	6.3x5.4	71	6.3x7.7	76	6.3x7.7	135	8x10.5	192	8x10.5	214	10x10.5	238				
220	6.3x5.4	96	6.3x7.7	95	6.3x7.7	150	6.3x7.7	150	8x10.5	232	8x10.5	246	10x10.5	289				
330	6.3x7.7	152	6.3x7.7	150	8x10.5	240	8x10.5	270	8x10.5	284								
470	6.3x7.7	200	8x10.5	265	8x10.5	290	8x10.5	307	10x10.5	393								
680	8x10.5	284	8x10.5	318	10x10.5	374	10x10.5	396										
1000	8x10.5	344	8x10.5	372	10x10.5	454												
			10x10.5	400														
1500	10x10.5	347	10x10.5	489														