

LF CD288H

- High frequency and lower ESR, 105°C
- Used in color-TV, VCD, audio set switching power supply, etc.
- Adapted to the ROHS directive (2002/95/EC).

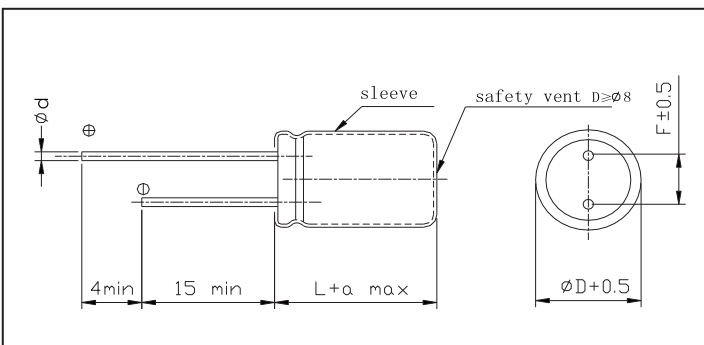


Specifications

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~ 15000 μF																										
Capacitance tolerance	±20% (120Hz, +20°C)																										
Leakage current	$I \leq 0.02CV (\mu A) \quad 4\mu A$ (at 20 °C, after 2 minutes) (Whichever is greater)	$I \leq 0.03CV (\mu A)$ (1 minute)																									
Dissipation factor (+20 °C, 120Hz) (tg δ)	<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 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>									$U_R(V)$	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
	$U_R(V)$	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>$U_R(V)$</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>									$U_R(V)$	160	200	250	400	450	tg δ	0.20	0.20	0.20	0.25	0.25						
$U_R(V)$	160	200	250	400	450																						
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 1 20Hz)	<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-40°C / Z+20 °C</td> <td>5</td> <td>5</td> <td>5</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> </tr> </table>									$U_R(V)$	6.3	10	16	25	35	50	63	100	Z-40°C / Z+20 °C	5	5	5	4	4	4	4	4
	$U_R(V)$	6.3	10	16	25	35	50	63	100																		
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$U_R(V)$	160	200	250	400	450																						
Z-20°C / Z+20 °C	4	4	5	5	5																						
Load life	After applying rated voltage for 1000 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	6.3	8	10	13	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	
d	0.5		0.5、0.6		0.6		0.8

α MAX	(L < 20) 1.5
	(L ≥ 20) 2.0

LOW Z

$\varnothing D \times L$ (mm)
 Impedance (20°C / 100KHz)
 Rated Ripple Current (+105°C,120Hz)

Dimensions

C _R (μF)	U _R	Item Code	6.3V(0J)			10v(1A)			16v(1C)			25V(1E)			
			case size ∅D×L	Impedance	Ripple	case size ∅D×L	Impedance	Ripple	case size ∅D×L	Impedance	Ripple	case size ∅D×L	Impedance	Ripple	
				(ΩMAX)	mArms		(ΩMAX)	mArms		(ΩMAX)	mArms		(ΩMAX)	mArms	
22	220														
27	270														
33	330										5x11	1.30	88		
39	390										5x11	1.10	100		
47	470									5x11	1.30	92	6.3x11	0.84	125
56	560									5x11	1.10	105	6.3x11	0.72	140
68	680				5x11	1.30	97	6.3x11	0.78	135	6.3x11	0.57	160		
82	820				5x11	1.10	110	6.3x11	0.66	155	6.3x11	0.47	180		
00	101	5x11	1.40	99	6.3x11	0.84	135	6.3x11	0.55	175	8x12	0.39	245		
120	121	5x11	1.10	115	6.3x11	0.72	160	6.3x11	0.45	195	8x12	0.32	275		
150	151	6.3x11	0.78	155	6.3x11	0.55	185	8x12	0.37	260	8x12	0.26	320		
180	181	6.3x11	0.60	175	6.3x11	0.46	205	8x12	0.31	285	8x16	0.22	390		
220	221	6.3x11	0.48	205	8x12	0.38	270	8x12	0.26	335	8x16	0.18	455		
270	271	8x12	0.39	275	8x12	0.31	300	8x16	0.22	410	8x20	0.15	560		
330	331	8x12	0.32	310	8x12	0.26	350	8x16	0.18	455	8x20	0.13	610		
390	391	8x12	0.27	345	8x16	0.22	430	8x20	0.16	570	10x20	0.11	770		
470	471	8x16	0.22	435	8x16	0.19	475	8x20	0.14	615	10x20	0.10	870		
560	561	8x16	0.19	480	8x20	0.16	590	10x20	0.12	770	10x25	0.084	990		
680	681	8x20	0.16	605	8x20	0.13	660	10x20	0.10	845	10x30	0.072	1180		
820	821	8x20	0.13	670	10x20	0.11	835	10x25	0.084	1030	13x20	0.059	1210		
1000	102	10x20	0.12	820	10x20	0.096	915	10x30	0.072	1210	13x25	0.048	1430		
1200	122	10x20	0.10	895	10x25	0.078	1120	13x20	0.060	1250	13x25	0.043	1550		
1500	152	10x25	0.084	1090	10x30	0.072	1290	13x25	0.048	1490	13x30	0.035	1780		
1800	182	10x30	0.078	1230	13x20	0.057	1320	13x30	0.039	1690	13x35	0.032	1960		
2200	222	13x25	0.066	1320	13x25	0.045	1530	13x30	0.034	1860	13x40	0.029	2120		
2700	272	13x25	0.051	1430	13x30	0.036	1740	13x35	0.031	1990	16x30	0.027	2220		
3300	332	13x30	0.045	1530	13x35	0.032	1960	13x40	0.028	2160	16x35	0.025	2410		
3900	392	13x30	0.037	1710	13x40	0.030	2120	16x30	0.027	2220	16x40	0.023	2530		
4700	472	13x35	0.034	1890	16x30	0.028	2170	16x35	0.025	2410	18x40	0.022	2660		
5600	562	13x40	0.031	2040	16x35	0.026	2340	16x40	0.024	2530					
6800	682	16x30	0.029	2130	16x35	0.024	2410	18x35	0.022	2610					
8200	822	16x35	0.027	2200	16x40	0.023	2530	18x40	0.021	2730					
10000	103	16x40	0.025	2470	18x40	0.021	2730								
12000	123	18x35	0.023	2530											
15000	153	18x40	0.022	2660											

C _R (μF)	U _R	Item Code	35V(1V)			50V(1H)			63V(1J)			100V(2A)		
			case size ∅D×L	Impedance	Ripple	case size ∅D×L	Impedance	Ripple	case size ∅D×L	Impedance	Ripple	case size ∅D×L	Impedance	Ripple
				(ΩMAX)	mArms		(ΩMAX)	mArms		(ΩMAX)	mArms		(ΩMAX)	mArms
0.47	R47				5x11	31.0	11				5x11	43.0	8	
0.68	R68				5x11	21.0	14				5x11	22.0	11	
1	010				5x11	14.0	18				5x11	17.0	13	
1.5	1R5				5x11	9.80	22				5x11	10.0	17	
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				6.3x11	2.80	34	
6.8	6R8				5x11	2.50	45				6.3x11	1.90	41	
10	100				5x11	2.00	57	5x11	1.60	67	6.3x11	1.20	52	
12	120				5x11	1.70	62	5x11	1.40	72	6.3x11	1.00	57	
15	150	5x11	1.30	85	5x11	1.30	72	6.3x11	0.10	92	8x12	0.81	65	
18	180	5x11	1.00	99	5x11	1.10	79	6.3x11	0.95	100	8x12	0.67	73	
22	220	6.3x11	0.78	125	6.3x11	0.91	100	6.3x11	0.78	110	8x12	0.55	122	
27	270	6.3x11	0.66	140	6.3x11	0.74	115	6.3x11	0.64	130	8x16	0.47	146	
33	330	6.3x11	0.54	160	6.3x11	0.60	135	8x12	0.52	170	8x16	0.38	169	
39	390	6.3x11	0.45	180	6.3x11	0.50	150	8x12	0.45	190	8x20	0.33	202	
47	470	8x12	0.37	230	8x12	0.42	195	8x12	0.37	215	10x20	0.28	252	
56	560	8x12	0.31	265	8x12	0.35	220	8x16	0.31	275	10x20	0.24	274	
68	680	8x12	0.26	305	8x12	0.28	255	8x16	0.26	315	10x25	0.21	326	
82	820	8x16	0.22	370	8x16	0.22	320	8x20	0.22	385	10x30	0.18	386	
100	101	8x16	0.18	415	8x20	0.18	410	10x20	0.18	495	10x30	0.15	438	
120	121	8x20	0.16	520	8x20	0.16	455	10x20	0.15	555	13x25	0.13	519	
150	151	8x20	0.13	580	10x20	0.13	570	10x25	0.13	665	13x30	0.11	553	
180	181	10x20	0.11	735	10x20	0.11	635	10x30	0.11	790	13x30	0.098	641	
220	221	10x20	0.096	810	10x25	0.098	760	13x20	0.094	835	13x35	0.087	730	
270	271	10x25	0.084	955	10x30	0.085	900	13x25	0.081	1000	13x40	0.072	843	
330	331	10x30	0.072	1130	10x30	0.072	995	13x25	0.072	1090	16x30	0.062	1160	
390	391	13x20	0.059	1160	13x25	0.053	1120	13x30	0.059	1260	16x35	0.053	1340	
470	471	13x25	0.048	1370	13x25	0.048	1190	13x35	0.052	1420	16x40	0.047	1530	
560	561	13x25	0.042	1490	13x30	0.040	1360	13x40	0.047	1580	18x35	0.041	1680	
680	681	13x30	0.035	1710	13x35	0.036	1530	16x30	0.043	1700	18x40	0.036	1910	
820	821	13x35	0.031	1920	13x40	0.033	1700	16x35	0.040	1880				
1000	102	13x40	0.029	2120	16x30	0.030	1830	16x40	0.037	2050				
1200	122	16x30	0.027	2220	16x35	0.028	1990	18x40	0.034	2210				
1500	152	16x35	0.024	2410	16x40	0.026	2170							
1800	182	16x40	0.022	2610	18x35	0.025	2210							
2200	222	18x40	0.021	2730	18x40	0.024	2300							

LOW Z

■ **Dimensions**

$C_R(\mu F)$	U_R Code	160V		200V		250V		400		450V	
		2C		2D		2E		2G		2W	
1	010	8x12	19	8x12	19	8x12	19	10x13	17	10x16	17
2.2	2R2	8x12	30	8x12	30	10x13	32	10x16	28	10x20	28
3.3	3R3	10x13	50	10x13	50	10x16	52	10x20	47	13x20	48
4.7	4R7	10x13	57	10x16	57	10x20	60	13x20	55	13x25	55
10	100	10x16	90	10x20	90	13x20	98	13x25	85	16x25	90
22	220	13x20	140	13x25	140	16x25	150	16x30	130	16x25	135
33	330	13x25	175	16x25	175	16x25	180	18x35	170	18x40	170
47	470	16x25	220	16x25	220	16x30	225				
100	101	16x35	330	18x40	330	18x40	345				

Rated ripple current (mA, +105°C, 120Hz)

■ **FREQUENCY COEFFICIENT OF ALLOWABLE RIPPLE CURRENT**

