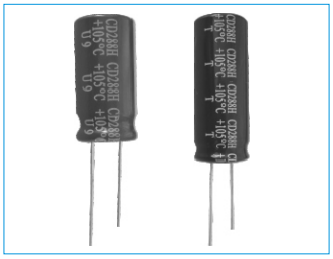
CD288H 105℃,Low Impedance Series



- High operating temperature with low impedance at high frequency
- Load life of 2000 hours at 105℃

ZLF Extremely. Low imp

CD288 Wide temp. → CD288H → CDZ11 Low imp. Wide temp.

Specifications

Item	Characteristics
Operating Temperature Range	–40℃ ~ +105℃
Rated Voltage Range	6.3V~450V
Nominal Capacitance Range	0.1 μ F~15000 μ F
Capacitance Tolerance	M (± 20%) (20℃,120Hz)
Leakage Current	I≤0.03CR UR or 3(μ A) CR:Nominal capacitance (μ F) UR:Rated voltage(V) (20℃, after 5 minutes)

Dissipation Factor (Max)

UR (V)	6.3	10	16	25	35	50	63~100	160~250	315~450
tan δ	0.24	0.20	0.16	0.14	0.12	0.10	0.09	0.15	0.20
0.02 is added to every 1000 μ F increase over 1000 μ F.									

(20℃,120Hz)

Low Temperature Stability (Impedance Ratio)

UR (V)	6.3~10	16	25~100	160~250	315~450
Z(–40℃) / Z(+20℃)	7	5	4	8	6

(120Hz)

Load Life

After 2000 hours' application of rated voltage with rated ripple current at 105℃, the capacitors shall meet the following requirement:

Capacitance change	Within ± 20% of the initial value .
Dissipation factor	Not more than 200% of the initial specified value.
Leakage current	Not more than the initial specified value.

Shelf Life

After storage for 1000 hours +105℃,the capacitors shall meet the requirement of load life above .

Rated Ripple Current & Frequency Multipliers

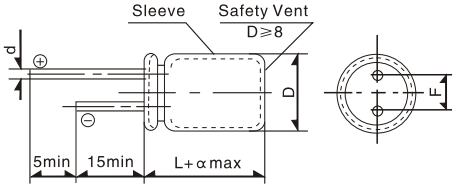
Rated Voltage	Cap. \ Freq.	50Hz	120Hz	1kHz	10kHz~	100kHz~
6.3V~100V	0.1~6.8	—	0.4	0.7	0.8	1.0
	10~68	—	0.5	0.8	0.9	1.0
	100~200	—	0.7	0.9	0.9	1.0
	330~1000	—	0.8	0.9	1.0	1.0
	2200~	—	0.9	1.0	1.0	1.0
160V~450V	0.47~330	0.8	1.0	1.3	1.4	1.6

Rated Ripple Current & Temperature Multipliers

UR(V) \ Temperature	+70℃	+85℃	+105℃
6.3–100	2.0	1.7	1.0
160–450	1.8	1.4	1.0

Dimensions

(mm)



D	± 0.5			± 1.0								
	5	6.3	8	10		12.5		16		18		
L	11	11	11.5	12.5	16	20	20	25	25	31.5	35.5	35.5	40
F ± 0.5	2	2.5	3.5	5					7.5			
d ± 0.1	0.5		0.6						0.8			
α	1.5						2.0					

CD288H Series

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

U_R(V) / Item / C_R(μF)	6.3			10			16			25		
	D×L mm	Z	I~	D×L mm	Z	I~	D×L mm	Z	I~	D×L mm	Z	I~
4.7										5×11	3.0	85
6.8										5×11	2.7	88
10							5×11	2.5	92	5×11	2.5	92
15							5×11	2.2	98	5×11	2.2	98
22				5×11	2.5	92	5×11	1.9	105	5×11	1.9	105
33	5×11	2.5	105	5×11	1.9	105	5×11	1.5	120	5×11	1.5	120
47	5×11	1.5	120	5×11	1.5	120	5×11	1.2	130	5×11	1.2	130
68	5×11	1.3	125	5×11	1.4	125	6.3×11	1.0	150	6.3×11	0.8	150
100	5×11	1.2	130	5×11	1.2	130	6.3×11	0.58	220	6.3×11	0.58	220
150	6.3×11	1.0	150	6.3×11	0.80	160	8×11.5	0.50	240	8×11.5	0.50	260
220	6.3×11	0.87	180	6.3×11	0.58	220	8×11.5	0.47	290	8×11.5	0.39	315
330	6.3×11	0.58	220	8×11.5	0.47	265	8×11.5	0.39	315	10×12.5	0.23	500
470	8×11.5	0.39	315	8×11.5	0.39	315	10×12.5	0.23	500	10×16	0.18	615
680	10×12.5	0.35	370	10×12.5	0.30	400	10×16	0.17	610	12.5×20	0.14	830
1000	10×12.5	0.23	500	10×16	0.18	615	10×20	0.12	825	12.5×20	0.090	1050
1500	10×20	0.18	630	10×20	0.15	810	12.5×20	0.10	1000	16×25	0.080	1200
2200	12.5×20	0.095	1000	12.5×20	0.090	1050	12.5×25	0.068	1300	16×25	0.056	1740
3300	12.5×20	0.090	1050	12.5×25	0.068	1300	16×25	0.056	1740	16×31.5	0.045	2110
4700	16×25	0.061	1670	16×25	0.056	1740	16×31.5	0.045	2110	18×35.5	0.036	2580
6800	16×25	0.056	1740	16×31.5	0.045	2110	18×35.5	0.036	2580			
10000	16×31.5	0.045	2110	18×35.5	0.036	2580						
15000	18×35.5	0.036	2580									

Rated ripple current (mA rms) (105℃,100kHz)

Impedance(Ω)(20℃,100kHz)

CD288H Series

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

U_R(V) / Item / C_R(μF)	35			50			63			100		
	D×L mm	Z	I~	D×L mm	Z	I~	D×L mm	Z	I~	D×L mm	Z	I~
0.1				5×11	18.0	10						
0.22				5×11	13.0	15						
0.33				5×11	10.0	18						
0.47				5×11	7.0	23				5×11	13.0	30
0.68				5×11	6.0	25				5×11	12.0	35
1.0				5×11	4.9	35				5×11	11.0	45
1.5				5×11	4.6	40				5×11	10.0	50
2.2				5×11	4.2	53				5×11	9.2	60
3.3				5×11	3.9	65				5×11	7.2	67
4.7	5×11	2.5	92	5×11	3.6	82	5×11	5.8	74	5×11	6.3	75
6.8	5×11	2.2	98	5×11	3.2	90	5×11	4.5	80	6.3×11	4.5	88
10	5×11	1.9	105	5×11	2.7	100	5×11	3.6	95	6.3×11	3.3	110
15	5×11	1.7	110	5×11	2.2	110	6.3×11	2.8	110	8×11.5	2.8	130
22	5×11	1.5	120	5×11	1.9	125	6.3×11	2.1	130	8×11.5	1.4	165
33	5×11	1.5	130	6.3×11	1.1	195	6.3×11	1.7	160	10×12.5	0.94	305
47	6.3×11	0.58	220	6.3×11	0.90	245	8×11.5	1.2	305	10×16	0.68	320
68	8×11.5	0.50	240	8×11.5	0.70	310	10×12.5	0.90	350	10×20	0.40	410
100	8×11.5	0.39	315	8×11.5	0.50	385	10×12.5	0.65	395	12.5×20	0.28	585
150	10×12.5	0.30	370	10×12.5	0.45	450	10×16	0.46	460	12.5×25	0.22	670
220	10×12.5	0.23	500	10×16	0.27	505	10×20	0.32	505	16×25	0.16	1120
330	10×16	0.18	615	10×20	0.18	675	12.5×20	0.22	660	16×25	0.13	1290
470	10×20	0.12	825	12.5×20	0.12	895	12.5×25	0.16	850	16×31.5	0.11	1350
680	12.5×25	0.10	1000	16×25	0.10	1100	16×31.5	0.12	1000			
1000	12.5×25	0.068	1300	16×25	0.076	1495	16×31.5	0.098	1430			
1500	16×25	0.060	1500	16×35.5	0.068	1800						
2200	16×31.5	0.045	2110	18×35.5	0.050	2190						
3300	18×35.5	0.036	2580									

Rated ripple current (mA rms) (105℃,100kHz)

Impedance(Ω)(20℃,100kHz)

CD288H Series

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

U_R(V) / Item / C_R(μF)	160		200		250		350		400		450	
	D×L mm	I~	D×L mm	I~	D×L mm	I~	D×L mm	I~	D×L mm	I~	D×L mm	I~
0.47											6.3×11	13
0.68											6.3×11	16
1.0									6.3×11	19	8×11.5	23
1.5							6.3×11	19	8×11.5	26	8×11.5	28
2.2					6.3×11	27	8×11.5	30	8×11.5	32	8×11.5	34
3.3			6.3×11	30	8×11.5	32	8×11.5	34	8×11.5	40	10×12.5	49
4.7	6.3×11	34	8×11.5	43	8×11.5	46	10×12.5	50	10×12.5	56	10×16	65
6.8	8×11.5	46	8×11.5	57	10×12.5	64	10×12.5	70	10×16	77	10×20	90
10	8×11.5	56	10×12.5	81	10×16	88	10×16	92	10×20	104	12.5×20	125
15	10×12.5	80	10×16	112	10×20	120	10×20	130	12.5×20	143	12.5×25	170
22	10×16	110	10×20	145	12.5×20	160	12.5×20	165	12.5×25	210	12.5×25	210
33	10×20	150	12.5×20	182	12.5×20	190	12.5×25	220	16×25	280	16×25	280
47	12.5×20	200	12.5×25	240	12.5×25	270	16×25	290	16×25	370	16×31.5	380
68	12.5×25	270	12.5×25	350	16×25	350	16×31.5	380	16×31.5	480	18×31.5	480
82	12.5×25	295	16×25	400	16×25	400	18×31.5	480	18×31.5	500	18×35.5	550
100	16×25	370	16×25	460	16×31.5	460	18×35.5	520	18×35.5	580	18×40	650
150	16×31.5	508	16×31.5	620	18×31.5	620	18×40	650	18×40	770	18×45	800
220	18×31.5	650	18×31.5	810	18×35.5	830	Rated ripple current (mA rms) (105℃,120Hz)					
330	18×35.5	850	18×40	1010								