

# CD288 SERIES

## Features

- Small size standard
- Low impedance
- Suitable for output of switching power supplies



## Specifications

Operating temperature	-40-+105°C					-25-+105°C					
Rated voltage range	6.3-100V DC					160-450V DC					
Nominal capacitance	4.7-4700μF										
Capacitance tolerance	±20%(25°Cc, 120Hz)										
Leakage current	1≤0.01CRUR 或 3(μA), Whichever is greater(2minutes)					1≤0.03CRUR+10(μA).(2minutes)					
Dissipation factor (25°C, 120HZ)	UR(V)	6.3	10	16	25	35	50	63	100	160	400
	TG δ	0.22	0.18	0.16	0.14	0.12	0.10	0.09	0.08	0.15	0.2
0.02 is added to every 1000uF increase over 1000uF											
Temperature Characteristics (120HZ)	UR(V)	6.3	10	16	25	35	50	63	100	-	-
	Z-25°C/Z+20°C	4	3	2	2	2	2	2	2	-	-
	Z-40°C/z+20°C	8	6	4	3	3	3	3	3	-	-
	UR(V)	160	250	400	450						
	Z-25°C/Z+20°C	7	5	5	4	-			-	-	-
1 is added to every 1000uF increase over 1000 uF											
Load life	After applying rated voltage with specified ripple current for 2000hours at +105°C and then resumed 16hours; Capacitance change: Within +20% of the initial measured value. Leakage current: Not more than the initial specified value. Dissipation factor: Not more than 150% of the initial specified value.										
Shelf life	After storage for 1000hours at +85°C then resumed 16hours; Capacitance change: With +20% of the initial measured value. Leakage current: Not more than 200% of the initial specified value. Dissipation factor: Not more than 120% of the initial specified value.										

Dimensions Ripple Current at 100KHz 105°C

most(mA)ESR(Ω)100KHz,20°C

**How to order**

**CD288**



**Series code**

**2**



**Number of characters for capacitance**  
(47uF=2, 470uF=3, 4700uF=4)

**470**



**Capacitance**  
(47uF=470, 3300uF=332, 33000uF=333)

**M**



**Capacitance tolerance**  
(M+20% K +/-10%)

**630**



**Voltage code**  
(6.3V=6R3, 10V= 100, 63V=630, 100V=101)

**B**



**Package**  
(B: Bulk pack, A : Ammo Pack)

**8X12**



**Size code**

**Environmental**

RoHS declaration (6/6) complies with the requirements of Directive 2002/95/EC, which stipulates the use of 100% Sn solder, gold plated or non-magnetic 100% Sn solder



**Application**

Computer	PC Power	Measuring instruments	Telecom Infrastructure

**Dimensions Ripple Current at 100KHz 105°C most(mA) ESR(Q)100KHz,20°C**

ITEM Cr(UF)	6.3			10			16			25		
	DXL (MM)	Ripple (mA)	Z Ω	DXL (MM)	Ripple (mA)	Z Ω	DXL (MM)	Ripple (mA)	Z Ω	DXL (MM)	Ripple (mA)	Z Ω
47							5×11	150	0.5	5×11	170	0.42
100				5x11	170	0.42	6.3x12	250	0.25	6.3x11	310	0.22
220				6.3x11	260	0.22	6.3x11	400	0.14	8x12	560	0.13
330	6.3x12	250	0.25	8x12	400	0.14	8x12	560	0.1	10x16	800	0.069
470	8x12	480	0.14	8x12	600	0.1	8x12	950	0.085	10x12	1200	0.068
680							8x16	800	0.08	10x16	1300	0.065
1000	8x16	800	0.1	8x16	1150	0.068	10x20	1400	0.046	13x20	1850	0.038
1200				8x16	1150	0.068						
1500	8x20	1708	0.084	10x16	1150	0.09	10x20	1470	0.05			
2200	10x20	1500	0.042	13x20	1900	0.038	13x20	2100	0.03	13x26	2850	0.022
2700	10x24	2226	0.051									
3300	13x21	1850	0.038	13x25	1850	0.05	13x25	2820	0.03			
4700	13x30	2500	0.025									

**Dimensions Ripple Current at 100KHz 105°C most(mA) ESR(Q)100KHz,20°C**

ITEM Cr(UF)	35			50			100		
	DXL (MM)	Ripple (mA)	Z Ω	DXL (MM)	Ripple (mA)	Z Ω	DXL (MM)	Ripple (mA)	Z Ω
1				5x11	40	4			
4.7	5x11	100	1.2	5x11	85	2	6x11	115	3
6.8				5x11	110	1.9			
10	5x11	120	0.9	5x11	100	1.7	6.3x11	170	2
22	5x11	170	0.42	5x11	150	0.7	8x12	280	0.9
33	5x11	180	0.42	6.3x12	250	0.42	10x20	473	0.4
47		200	0.36	6.3x12	250	0.42	10x20	473	0.4
100	8x12	400	0.14	8x12	500	0.2	10x25	875	0.2
220	10x12	800	0.095	10x17	950	0.1	12x35	1550	0.1
330	10x20	1200	0.08	10x25	1250	0.067	16x30	1920	0.067
470	10x25	1400	0.07	13x20	1450	0.055	16x40	2220	0.055
680	13x20	2324	0.06						
1000	13x20	2150	0.055	16x25	2300	0.026			

**Dimensions Ripple Current at 100KHz 105°C most(mA) ESR(Q)100KHz,20°C**

ITEM Cr(UF)	160			200			250		
	DXL (MM)	Ripple (mA)	Z Ω	DXL (MM)	Ripple (mA)	Z Ω	DXL (MM)	Ripple (mA)	Z Ω
2.2									
3.3									
4.7									
10							10x20	220	2.8
22	10x20	350	1	10x20	350	1.2	13x25	300	2
33	13x20	450	0.9	13x20	520	0.78	13x25	400	1.4
47	13x25	600	0.81	13x25	600	0.7	16x25	720	0.9
100	16x25	950	0.35	16x25	950	0.27	16x30	980	0.56
220	18x35	1300	0.28	16x30	1350	0.2	18x35	1360	0.28
470	18x40	1600	0.24	18x50	1690	0.12			

**Dimensions Ripple Current at 100KHz 105°C most(mA) ESR(Q)100KHz,20°C**

ITEM Cr(UF)	350			400			450		
	DXL (MM)	Ripple (mA)	Z	DXL (MM)	Ripple (mA)	Z	DXL (MM)	Ripple (mA)	Z
			Ω			Ω			Ω
2.2	10x17	50	3.5	10x17	140	4.4	10x17	110	7.2
3.3	10x17	60	3.4	10x20	195	2.8	10x20	135	5.8
4.7	10x20	78	2.8	10x25	220	2.4	13x25	190	3.5
10	13x20	130	1.5	13x25	360	1.3	16x25	250	2.2
22	16x25	250	0.8	16x25	570	0.6	16x30	480	0.8
33	16x30	480	0.7	16x30	700	0.5	18x30	650	0.5
47	18x30	710	0.5	18x30	860	0.4	18x35	850	0.6
100	18x45	1050	0.4	18x35	1150	0.34			
220	18x55	1400	0.3						