

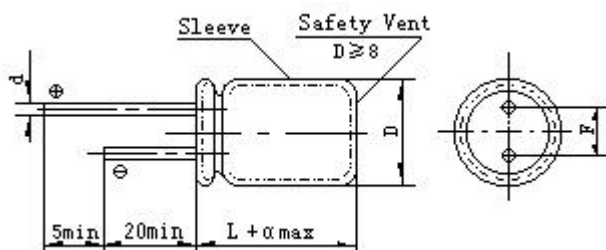
CDT02 Extremely High Ripple Current Series

- Extremely high ripple current
- High reliability withstanding 3000 hours load life at 105°C
- Suited for electronic ballast circuits

■ Specifications

Item	Characteristics														
Operating Temperature Range	-25°C ~ +105°C														
Rated Voltage Range	160V ~ 400V														
Nominal Capacitance Range	1.0 μ F ~ 100 μ F														
Capacitance Tolerance	M ($\pm 20\%$); Q (-10% ~ +30%) (20°C, 120Hz)														
Leakage Current	$I \leq 0.02C_R U_R$ (μ A) C_R : Nominal capacitance (μ F) U_R : Rated voltage(V) (20°C, after 5 minutes)														
Dissipation Factor (Max)	$\tan \delta \leq 0.12$ (20°C, 120Hz)														
Low Temperature Stability (Impedance Ratio)	$Z(-25^\circ\text{C})/Z(+20^\circ\text{C}) \leq 7$ (120Hz)														
Load Life	After 3000 hours' application of rated voltage with rated ripple current at 105°C, the capacitor shall meet the following requirement: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Capacitance change</td> <td>Within $\pm 20\%$ of the initial value.</td> </tr> <tr> <td>Dissipation factor</td> <td>Not more than 200% of the initial specified value.</td> </tr> <tr> <td>Leakage current</td> <td>Not more than the initial specified value.</td> </tr> </table>	Capacitance change	Within $\pm 20\%$ of the initial value.	Dissipation factor	Not more than 200% of the initial specified value.	Leakage current	Not more than the initial specified value.								
Capacitance change	Within $\pm 20\%$ 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 at +105°C, the capacitors shall meet the requirement of load life above.														
Rated Ripple Current & Frequency Multipliers	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Frequency</td> <td>50Hz</td> <td>120Hz</td> <td>300Hz</td> <td>1kHz</td> <td>10kHz</td> <td>100kHz</td> </tr> <tr> <td>Multiplier</td> <td>0.3</td> <td>0.5</td> <td>0.6</td> <td>0.8</td> <td>0.9</td> <td>1.0</td> </tr> </table>	Frequency	50Hz	120Hz	300Hz	1kHz	10kHz	100kHz	Multiplier	0.3	0.5	0.6	0.8	0.9	1.0
Frequency	50Hz	120Hz	300Hz	1kHz	10kHz	100kHz									
Multiplier	0.3	0.5	0.6	0.8	0.9	1.0									
Rated Ripple Current & Temperature Multipliers	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Temperature</td> <td>+50°C</td> <td>+70°C</td> <td>+85°C</td> <td>+105°C</td> </tr> <tr> <td>Multiplier</td> <td>2.1</td> <td>1.8</td> <td>1.4</td> <td>1.0</td> </tr> </table>	Temperature	+50°C	+70°C	+85°C	+105°C	Multiplier	2.1	1.8	1.4	1.0				
Temperature	+50°C	+70°C	+85°C	+105°C											
Multiplier	2.1	1.8	1.4	1.0											

■ Dimensions



		(mm)										
$D \pm 1.0$	6.3	8	10	12.5	16		18					
L	12	12	16	16	20	20	25	25	31.5	35.5	35.5	40
$F \pm 0.5$	2.5	3.5		5.0			7.5					
$d \pm 0.1$	0.5	0.6					0.8					
α	1.5			2.0								

CDT02Series

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

U _R (V) C _R (μF) Item	160		200		250		350		400	
	D×L mm	I~	D×L mm	I~	D×L mm	I~	D×L mm	I~	D×L mm	I~
1.0					8×12	18			6.3×12	18
2.2									8×16	108
3.3	Rated ripple current (mA rms) (105°C, 100kHz) ↓								8×16	108
									8×20	121
4.7			8×12	158	10×16	200			10×20	180
6.8			10×16	230	10×16	240			10×20 12.5×20	220 240
10			10×16	310	10×16	300	10×20	250	10×20 12.5×20	250 270
15			10×20	400	10×16	380			16×25	400
22	10×20	500	10×20	500	10×20 12.5×20	500 600	12.5×20	350	12.5×25 16×25	400 500
33	10×20	500	12.5×20	600	12.5×20 12.5×25	600 670	16×20	500	16×25 16×31.5	600 670
47	12.5×20 12.5×25	600 670	12.5×20	600	12.5×25 16×25	700 780	16×25	650	16×35.5 18×25	750 750
68	12.5×25	750	12.5×25 16×20	750 750	16×25 18×35.5	1000 1200	18×25	800		
100	16×25	1100	16×25 18×20	1100 1100	18×25 18×40	1200 1500				