

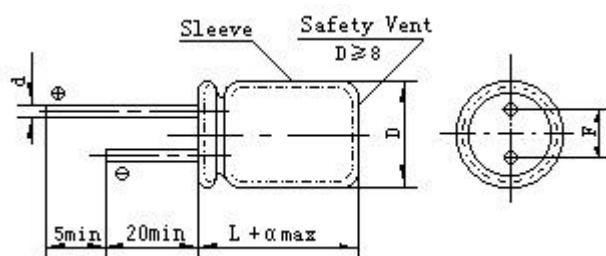
## CDT02 Extremely High Ripple Current Series

- 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	1.0μF ~ 100μF															
Capacitance Tolerance	M ( $\pm 20\%$ ); Q (-10% ~ +30%) (20°C, 120Hz)															
Leakage Current	$I \leq 0.02C_R U_R$ (μA) C <sub>R</sub> : Nominal capacitance (μF)    U <sub>R</sub> : 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"> <tr> <td>Capacitance change</td> <td>Within <math>\pm 20\%</math> 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.								
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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"> <tr> <th>Frequency</th> <th>50Hz</th> <th>120Hz</th> <th>300Hz</th> <th>1kHz</th> <th>10kHz</th> <th>100kHz</th> </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
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Rated Ripple Current & Temperature Multipliers	<table border="1"> <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				
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### ■ Dimensions



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

**CDT02 Series**

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

UR(V) C <sub>R</sub> (uF)	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	220
									12.5×20	240
10			10×16	310	10×16	300	10×20	250	10×20	250
									12.5×20	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	16×25 18×35.5	1000 1200	18×25	800		
100	16×25	1100	16×25 18×20	1100	18×25 18×40	1200 1500				