

# TS13D CD71

## FEATURES

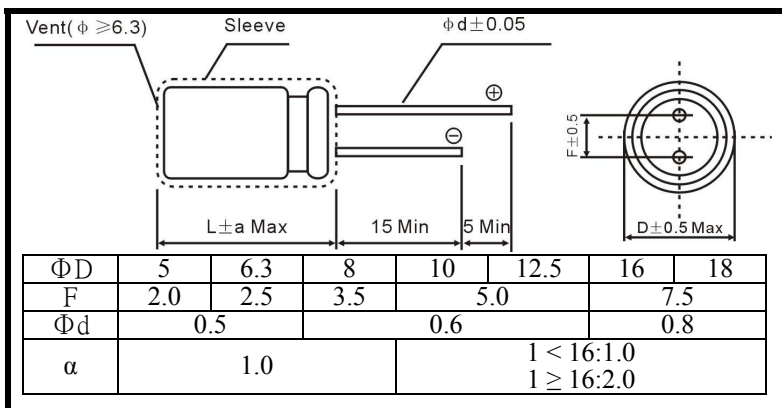
- Non-Polarized
- Standard series
- Used in polarity reverse and change circuits

## ◆ Specifications

SPECIFICATIONS																														
Operating Temperature Range	-40~+85°C																													
Rated Voltage Range	6.3 ~ 160V																													
Nominal Capacitance Range	0.47 ~ 6800 $\mu$ F																													
Capacitance Tolerance	$\pm$ 20% (120Hz, +20°C)																													
Leakage Current	$\leq$ 0.03CV + 3( $\mu$ A) (1 minute)																													
Dissipation Factor (+25°C, 120Hz)	<table border="1"> <tr> <th>Rated voltage(V)</th> <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> <td>160</td> </tr> <tr> <th>Tan <math>\delta</math></th> <td>0.28</td> <td>0.24</td> <td>0.22</td> <td>0.20</td> <td>0.15</td> <td>0.14</td> <td>0.10</td> <td>0.09</td> <td>0.15</td> </tr> </table>	Rated voltage(V)	6.3	10	16	25	35	50	63	100	160	Tan $\delta$	0.28	0.24	0.22	0.20	0.15	0.14	0.10	0.09	0.15									
	Rated voltage(V)	6.3	10	16	25	35	50	63	100	160																				
Tan $\delta$	0.28	0.24	0.22	0.20	0.15	0.14	0.10	0.09	0.15																					
For capacitance value > 1000 $\mu$ F, add 0.02 for every increase of 1000 $\mu$ F																														
Temperature Characteristics (120Hz)	<table border="1"> <tr> <th colspan="2">Rated Voltage (V)</th> <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> <td>160</td> </tr> <tr> <th rowspan="2">Impedance Ratio</th> <th>Z-25°C/Z+20°C</th> <td>4</td> <td>3</td> <td colspan="5">2</td> <td>4</td> </tr> <tr> <th>Z-40°C/Z+20°C</th> <td>10</td> <td>8</td> <td>6</td> <td>5</td> <td>4</td> <td>3</td> <td>-</td> </tr> </table>	Rated Voltage (V)		6.3	10	16	25	35	50	63	100	160	Impedance Ratio	Z-25°C/Z+20°C	4	3	2					4	Z-40°C/Z+20°C	10	8	6	5	4	3	-
	Rated Voltage (V)		6.3	10	16	25	35	50	63	100	160																			
Impedance Ratio	Z-25°C/Z+20°C	4	3	2					4																					
	Z-40°C/Z+20°C	10	8	6	5	4	3	-																						
Load Life (85°C)	After applying rated voltage for 500x2 hours at +85°C and then resumed 16 hours																													
	Leakage current	$\leq$ Initial specified value																												
	Capacitance change	$\pm$ 20% initial measured value																												
Shelf Life (85°C)	After storage for 1000 hours at +85°C and then resumed 16 hours																													
	Leakage current	$\leq$ 2 Initial specified value																												
	Capacitance change	$\pm$ 20% initial measured value																												
	Dissipation factor	$\leq$ 2 Initial specified value																												

## ◆ Dimensions

mm



## ◆ Multiplier for ripple current

### Frequency correction

Rated Voltage(V)	Freq(Hz)				
	Factor	50,60	120	1K	10K
6.3 ~ 16	0.80	1	1.1	1.2	1.2
25 ~ 35	0.80	1	1.5	1.7	1.7
50 ~ 160	0.80	1	1.6	1.9	1.9

### Temperature coefficient

Temperature (°C)	+70	+85
Factor	1.35	1

# TS13D CD71

◆ Case Size DxL (mm)

Cap/μF \ WV/V	6.3		10		16		25		35	
0.47	--	--	--	--	--	--	--	--	--	--
1.0	--	--	--	--	--	--	--	--	--	--
2.2	--	--	--	--	--	--	--	--	--	--
3.3	--	--	--	--	--	--	--	--	--	--
4.7	--	--	--	--	--	--	--	--	5x11	34
10	--	--	--	--	5x11	47	5x11	42	5x11	43
22	--	--	5x11	57	5x11	57	6.3x11	65	6.3x11	73
33	5x11	64	5x11	64	5x11	40	6.3x11	80	8x12	100
47	5x11	76	5x11	76	6.3x11	95	6.3x11	95	8x12	120
100	6.3x11	125	6.3x11	125	8x12	160	8x12	160	10x16	230
220	8x12	215	8x12	215	10x13	275	10x16	305	13x20	410
330	8x12	265	10x16	345	10x16	375	13x20	450	13x20	505
470	10x13	370	10x16	410	10x20	485	13x20	540	13x25	655
1000	10x20	650	13x20	720	16x25	855	16x25	950	16x30	1140
2200	13x25	1160	16x25	1280	16x30	1510	19x35	1620	--	--
3300	16x25	1570	16x30	1690	19x35	1960	--	--	--	--
4700	16x30	2020	19x35	2160	--	--	--	--	--	--
6800	19x35	2600	--	--	--	--	--	--	--	--

Cap/μF \ WV/V	50		63		100		160	
0.47	5x11	11	--	--	5x11	14	--	--
1.0	5x11	17	--	--	5x11	21	--	--
2.2	5x11	25	--	--	6.3x11	34	--	--
3.3	5x11	27	5x11	28	6.3x11	39	10x16	49
4.7	5x11	34	6.3x11	34	6.3x11	47	10x16	59
10	6.3x11	52	6.3x11	57	8x12	71	13x20	109
22	8x12	89	8x12	95	10x16	135	13x25	177
33	8x12	105	10x13	135	13x20	220	16x25	240
47	10x13	150	10x12.5	155	13x20	240	16x35	329
100	10x20	265	13x20	320	16x25	425	19x35	425
220	13x25	480	16x25	575	19x35	720	--	--
330	16x25	650	16x30	655	--	--	--	--
470	16x30	835	19x35	965	--	--	--	--

Rated ripple current (mA, +85°C, 120Hz)

Note: Specification are subject to change without notice. For more detail and update, please visit our website.