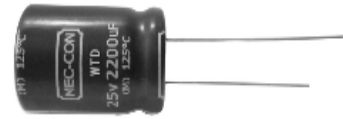
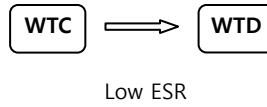




WTD series

- Wide temperature
- Ultra Low ESR
- High Ripple Current
- RoHS compliant

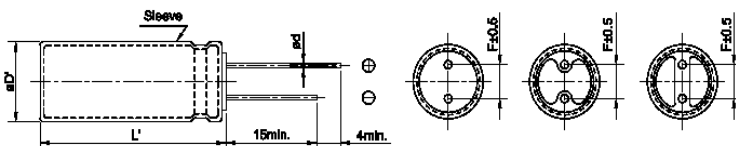
- 125°C 2,000~4,000Hrs assured.
- Long life, Wide temperature
- For Ballaster, LED Lighting power
- RoHS compliant
- Halogen-free capacitors are also available.



Specifications

Item	Characteristics																		
Rated Voltage Range	10 ~ 50 Vdc																		
Operating Temperature Range	-55 ~ +125°C																		
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)																		
Leakage Current	I=0.03CV(μA) or 4uA whichever is greater Where, I:Max. Leakage current(μA), C:Nominal capacitance(μF), V:Rated voltage(Vdc) (at 20°C, 1minutes)																		
Dissipation Factor(Tanδ)	<table border="1"> <tr> <td>Rated voltage (Vdc)</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td>Tanδ (max.)</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> </tr> </table> (at 20°C, 120Hz)	Rated voltage (Vdc)	10	16	25	35	50	Tanδ (max.)	0.20	0.16	0.14	0.12	0.10						
Rated voltage (Vdc)	10	16	25	35	50														
Tanδ (max.)	0.20	0.16	0.14	0.12	0.10														
Temperature characteristics (Max,impedance ratio)	<table border="1"> <tr> <td>Rated voltage (Vdc)</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>3</td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>6</td> <td>4</td> <td>4</td> <td>4</td> <td>5</td> </tr> </table> (at 120Hz)	Rated voltage (Vdc)	10	16	25	35	50	Z(-25°C)/Z(20°C)	3	2	2	2	3	Z(-40°C)/Z(20°C)	6	4	4	4	5
Rated voltage (Vdc)	10	16	25	35	50														
Z(-25°C)/Z(20°C)	3	2	2	2	3														
Z(-40°C)/Z(20°C)	6	4	4	4	5														
Load life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for specified life times 4,000hrs at 125°C (2,000hrs for 8Ø) Capacitance change ≤±20%of the initial value Tan δ ≤300% of the initial specified value Leakage current ≤The initial specified value																		
Shelf life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 125°C without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes at least 24 hours and not more than 48 hours before the measurements. Capacitance change ≤±20% of the initial value Tanδ ≤300% of the initial specified value Leakage current ≤200%The initial specified value																		

Dimensions

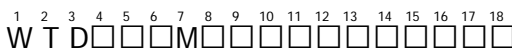


Unit(mm)

ØD	8	10	12.5	16
Ød	0.5 0.6	0.6	0.6	0.8
F	3.5	5.0	5.0	7.5
ØD'	ØD+0.5 max.			
L'	L+2.0 max			

- Printed black color letter on PET yellow sleeve

Code numbering system



- Taping, Cutting
- Terminal type
- Size (10X20: G20)
- Capacitance
- Capacitance tolerance(M: ±20%, K: ±10%, V : -10~20%)
- Rated voltage(ex. 160V→160)
- Series name

Ø8	F
Ø10	G
Ø12.5	X
Ø16	J

WTD series

Standard Ratings Note1) Ripple current = mArms/125°C,100kHz

WV (Vdc)	Cap (uF)	Size ØxL(mm)	Tan δ	Ripple ¹⁾	Code No
10	220	8 x 11.5	0.20	400	WTD010□221F12CS□□□
	330	10 x 12.5	0.20	720	WTD010□331G13CS□□□
	470	10 x 12.5	0.20	720	WTD010□471G13CS□□□
	1,000	10 x 20	0.20	1,100	WTD010□102G20CS□□□
	2,200	12.5 x 25	0.22	1,550	WTD010□222X25CS□□□
	3,300	16 x 25	0.24	2,000	WTD010□332J25CS□□□
16	4,700	16 x 31.5	0.26	2,500	WTD010□472J32CS□□□
	100	8 x 11.5	0.16	400	WTD016□101F12CS□□□
	220	10 x 12.5	0.16	720	WTD016□221G13CS□□□
	330	10 x 12.5	0.16	720	WTD016□331G13CS□□□
	470	10 x 16	0.16	940	WTD016□471G16CS□□□
	1,000	12.5 x 20	0.16	1,240	WTD016□102X20CS□□□
25	2,200	16 x 25	0.18	2,000	WTD016□222J25CS□□□
	3,300	16 x 31.5	0.20	2,500	WTD016□332J32CS□□□
	100	8 x 11.5	0.14	400	WTD025□101F12CS□□□
	220	10 x 12.5	0.14	720	WTD025□221G13CS□□□
	330	10 x 16	0.14	940	WTD025□331G16CS□□□
	470	10 x 20	0.14	1,100	WTD025□471G20CS□□□
35	1,000	12.5 x 25	0.14	1,550	WTD025□102X25CS□□□
	2,200	16 x 31.5	0.16	2,500	WTD025□222J32CS□□□
	100	8 x 11.5	0.12	400	WTD035□101F12CS□□□
	220	10 x 16	0.12	940	WTD035□221G16CS□□□
	330	10 x 20	0.12	1,100	WTD035□331G20CS□□□
	470	12.5 x 20	0.12	1,250	WTD035□471X20CS□□□
50	1,000	16 x 25	0.12	2,000	WTD035□102J25CS□□□
	10	8 x 11.5	0.10	230	WTD050□100F12CS□□□
	22	8 x 11.5	0.10	320	WTD050□220F12CS□□□
	33	8 x 11.5	0.10	340	WTD050□330F12CS□□□
	47	8 x 11.5	0.10	350	WTD050□470F12CS□□□
	100	10 x 12.5	0.10	580	WTD050□101G13CS□□□
	220	10 x 20	0.10	960	WTD050□221G20CS□□□
	330	12.5 x 20	0.10	1,150	WTD050□331X20CS□□□
470	12.5 x 25	0.10	1,400	WTD050□471X25CS□□□	
1,000	16 x 31.5	0.10	2,200	WTD050□102J32CS□□□	

Rated ripple current multipliers

Cap(uF)	Freq.(Hz)	120	1k	10k	50k	100k
4.7 ~ 100		0.40	0.75	0.90	0.93	1.00
220 ~ 470		0.50	0.85	0.94	0.96	1.00
1000		0.60	0.87	0.95	0.97	1.00
2200 ~ 3300		0.75	0.90	0.95	0.97	1.00
~ 4700		0.85	0.95	0.98	0.99	1.00