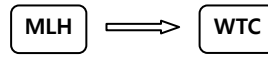




WTC series

- Wide temperature
- High-Ripple current
- RoHS compliant

- 125°C 3,000~5,000Hrs assured.
- Long life, Wide temperature
- For Ballaster, LED Lighting power
- RoHS compliant
- Halogen-free capacitors are also available.



High temperature

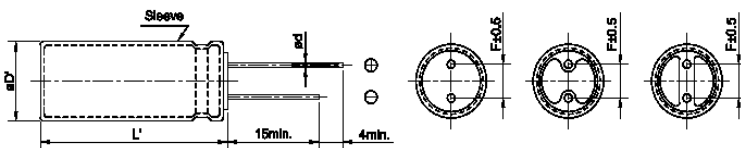


Specifications

Item	Characteristics								
Rated Voltage Range	10 ~ 100 Vdc	160 ~ 400 Vdc	450 Vdc						
Operating Temperature Range	-55 ~ +125°C	-40 ~ +125°C	-25 ~ +125°C						
Capacitance Tolerance	±20% (M)		(at 20°C, 120Hz)						
Leakage Current	I=0.03CV(µA) or 4µA whichever is greater		CV≤1,000 : I=0.1CV+40(µA) CV>1,000 : I=0.04CV+100(µA)						
	Where, I:Max. Leakage current(µA), C:Nominal capacitance(µF), V:Rated voltage(Vdc) (at 20°C, 1minutes)								
Dissipation Factor(Tanδ)	Rated voltage (Vdc)	10	16	25	35	50-63	80-100	160-250	350-450
	Tanδ (max.)	0.20	0.16	0.14	0.12	0.10	0.08	0.20	0.24
(at 20°C, 120Hz)									
Temperature characteristics (Max,impedance ratio)	Rated voltage (Vdc)	10	16-35	50-80	100	160-250	350-400	450	
	Z(-25°C)/Z(20°C)	3	2	3	3	3	6	6	
	Z(-40°C)/Z(20°C)	6	4	5	6	6	10	-	
(at 120Hz)									
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 5,000hrs at 125°C (3,000hrs for 8Ø)								
	Capacitance change	≤±20%of the initial value							
Tan δ	≤200% 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	≤500%The initial specified value								

Dimensions

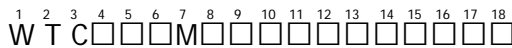
Unit(mm)



- Printed black color letter on PET yellow sleeve

	8	10	12.5	16
ØD	8	10	12.5	16
Ød	0.5	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			

Code numbering system



- Taping, Cutting
- Terminal type
- Size (16X25: J25)
- 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

WTC 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	320	WTC010□221F12CS□□□
	330	10 x 12.5	0.20	480	WTC010□331G13CS□□□
	470	10 x 12.5	0.20	480	WTC010□471G13CS□□□
	1,000	10 x 20	0.20	800	WTC010□102G20CS□□□
	2,200	12.5 x 25	0.22	996	WTC010□222X25CS□□□
	3,300	16 x 25	0.24	1,450	WTC010□332J25CS□□□
4,700	16 x 31.5	0.26	1,600	WTC010□472J32CS□□□	
16	100	8 x 11.5	0.16	320	WTC016□101F12CS□□□
	220	10 x 12.5	0.16	480	WTC016□221G13CS□□□
	330	10 x 12.5	0.16	480	WTC016□331G13CS□□□
	470	10 x 16	0.16	628	WTC016□471G16CS□□□
	1,000	12.5 x 20	0.16	880	WTC016□102X20CS□□□
	2,200	16 x 25	0.18	1,450	WTC016□222J25CS□□□
3,300	16 x 31.5	0.20	1,600	WTC016□332J32CS□□□	
25	100	8 x 11.5	0.14	320	WTC025□101F12CS□□□
	220	10 x 12.5	0.14	480	WTC025□221G13CS□□□
	330	10 x 16	0.14	628	WTC025□331G16CS□□□
	470	10 x 20	0.14	800	WTC025□471G20CS□□□
	1,000	12.5 x 25	0.14	996	WTC025□102X25CS□□□
	2,200	16 x 31.5	0.16	1,600	WTC025□222J32CS□□□
35	100	8 x 11.5	0.12	320	WTC035□101F12CS□□□
	220	10 x 16	0.12	628	WTC035□221G16CS□□□
	330	10 x 20	0.12	800	WTC035□331G20CS□□□
	470	12.5 x 20	0.12	880	WTC035□471X20CS□□□
	1,000	16 x 25	0.12	1,450	WTC035□102J25CS□□□
50	10	8 x 11.5	0.10	180	WTC050□100F12CS□□□
	22	8 x 11.5	0.10	240	WTC050□220F12CS□□□
	33	8 x 11.5	0.10	280	WTC050□330F12CS□□□
	47	8 x 11.5	0.10	300	WTC050□470F12CS□□□
	100	10 x 12.5	0.10	480	WTC050□101G13CS□□□
	220	10 x 20	0.10	800	WTC050□221G20CS□□□
	330	12.5 x 20	0.10	980	WTC050□331X20CS□□□
	470	12.5 x 25	0.10	1,160	WTC050□471X25CS□□□
1,000	16 x 31.5	0.10	1,600	WTC050□102J32CS□□□	
63	33	8 x 11.5	0.10	150	WTC063□330F12CS□□□
	47	10 x 12.5	0.10	480	WTC063□470G13CS□□□
	100	10 x 16	0.10	628	WTC063□101G16CS□□□
	220	12.5 x 20	0.10	960	WTC063□221X20CS□□□
	330	12.5 x 25	0.10	1,250	WTC063□331X25CS□□□
	470	12.5 x 30	0.10	1,400	WTC063□471X30CS□□□
1,000	16 x 31.5	0.10	1,650	WTC063□102J32CS□□□	
80	22	8 x 11.5	0.08	150	WTC080□220F12CS□□□
	33	10 x 12.5	0.08	480	WTC080□330G13CS□□□
	47	10 x 12.5	0.08	500	WTC080□470G13CS□□□
	100	10 x 20	0.08	790	WTC080□101G20CS□□□
	220	12.5 x 25	0.08	1,250	WTC080□221X25CS□□□
330	12.5 x 30	0.08	1,400	WTC080□331X30CS□□□	
470	16 x 25	0.08	1,500	WTC080□471J25CS□□□	
100	10	8 x 11.5	0.08	130	WTC100□100F12CS□□□
	22	10 x 12.5	0.08	440	WTC100□220G13CS□□□
	33	10 x 12.5	0.08	460	WTC100□330G13CS□□□
	47	10 x 16	0.08	600	WTC100□470G16CS□□□
	100	12.5 x 20	0.08	880	WTC100□101X20CS□□□
	220	16 x 25	0.08	1,320	WTC100□221J25CS□□□
330	16 x 31.5	0.08	1,400	WTC100□331J32CS□□□	

Note2) Ripple current = mArms/125°C,120Hz (160~450Vdc)

WV (Vdc)	Cap (uF)	Size ØxL(mm)	Tan δ	Ripple ¹⁾	Code No
160	22	10 x 16	0.20	115	WTC160□220G16CS□□□
	33	10 x 20	0.20	150	WTC160□330G20CS□□□
	47	12.5 x 20	0.20	186	WTC160□470X20CS□□□
	68	12.5 x 25	0.20	248	WTC160□680X25CS□□□
	100	16 x 25	0.20	330	WTC160□101J25CS□□□
	150	16 x 31.5	0.20	434	WTC160□151J32CS□□□
200	10	10 x 16	0.20	78	WTC200□100G16CS□□□
	22	10 x 20	0.20	130	WTC200□220G20CS□□□
	33	12.5 x 20	0.20	160	WTC200□330X20CS□□□
	47	12.5 x 25	0.20	202	WTC200□470X25CS□□□
	68	16 x 20	0.20	250	WTC200□680J20CS□□□
	100	16 x 25	0.20	330	WTC200□101J25CS□□□
250	10	10 x 20	0.20	78	WTC250□100G20CS□□□
	22	12.5 x 20	0.20	128	WTC250□220X20CS□□□
	33	12.5 x 25	0.20	170	WTC250□330X25CS□□□
	47	16 x 25	0.20	225	WTC250□470J25CS□□□
68	16 x 31.5	0.20	292	WTC250□680J32CS□□□	
350	4.7	10 x 16	0.24	50	WTC350□47G16CS□□□
	10	10 x 20	0.24	86	WTC350□100G20CS□□□
	22	12.5 x 25	0.24	138	WTC350□220X25CS□□□
	33	16 x 25	0.24	188	WTC350□330J25CS□□□
47	16 x 31.5	0.24	240	WTC350□470J32CS□□□	
400	4.7	10 x 20	0.24	50	WTC400□47G20CS□□□
	10	12.5 x 20	0.24	86	WTC400□100X20CS□□□
	22	12.5 x 30	0.24	142	WTC400□220X30CS□□□
	33	16 x 25	0.24	188	WTC400□330J25CS□□□
47	16 x 31.5	0.24	240	WTC400□470J32CS□□□	
450	4.7	10 x 25	0.24	55	WTC450□47G25CS□□□
	10	12.5 x 20	0.24	86	WTC450□100X20CS□□□
	22	16 x 25	0.24	154	WTC450□220J25CS□□□
33	16 x 31.5	0.24	200	WTC450□330J32CS□□□	

Rated ripple current multipliers

(10~100Vdc)

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

(160 ~ 450Vdc)

Cap(uF) \ Freq.(Hz)	120	1k	10k	50k	100k
4.7 ~ 33	1.00	1.50	1.75	1.76	1.80
47 ~ 150	1.00	1.30	1.40	1.43	1.50