

TN Series

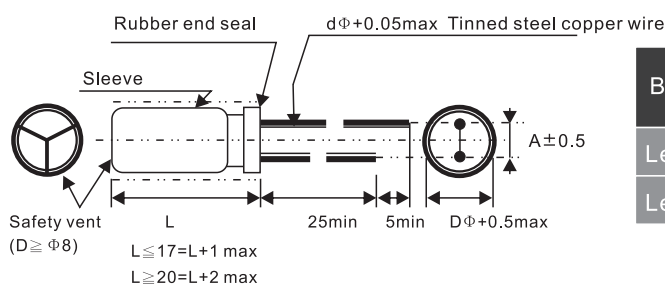
- 105°C, 1000 hours standard series.

- SPECIFICATIONS



Items	Characteristics									
Category Temperature Range	- 40 to +105°C									
Rated Voltage Range	6.3v to 100Vdc									
Capacitance Tolerance	± 20% (M) (at 20°C, 120Hz)									
Leakage Current	I=0.01CV or 3 μA, whichever is greater. Where, I :Max. Leakage current (μA). C : Nominal capacitance (μF) .V :Rated voltage(V) (at 20°C, after 2 minutes)									
Dissipation Factor (tan δ)	Rated voltage (Vdc)	6.3V	10V	16V	25V	35V	50V	63V	100V	
	tan δ (Max.)	0.22	0.19	0.16	0.14	0.12	0.10	0.08	0.08	(at 20°C, 120Hz)
For capacitance > 1000uF and 2% per another 1000uF										
Low Temperature Characteristics	Impedance ratio max at 120Hz									
	Working voltage	6.3v	10v	16v	25v	35v	50v	63v	100v	
	Z-25°C / Z+20°C	4	3	2	2	2	2	2	2	
	Z-40°C / Z+20°C	8	6	4	4	3	3	3	3	
Load. Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the voltage is applied for 1000 hours at 105°C									
	Capacitance change	≤ ±20% of the initial value								
	DF (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 500 hours at 105°C without voltage applied.									
	Capacitance change	≤ ±20% of the initial value								
	DF (tan δ)	≤ 200 % of the initial specified value								
	Leakage current	≤ The initial specified value								
Ripple Current Multiplier	Temperature coefficient									
	Temperature(°C)	~55	60	70	85	105				
	Factor	2.20	2.10	2.00	1.75	1.00				
	Frequency coefficient									
	cap \ freq	60	120	1k	10k	100k				
	~100	0.70	1.00	1.40	1.50	1.50				
	100~1000	0.75	1.00	1.30	1.35	1.35				
1000up	0.80	1.00	1.12	1.15	1.15					

- Diagram: (Unit: mm)

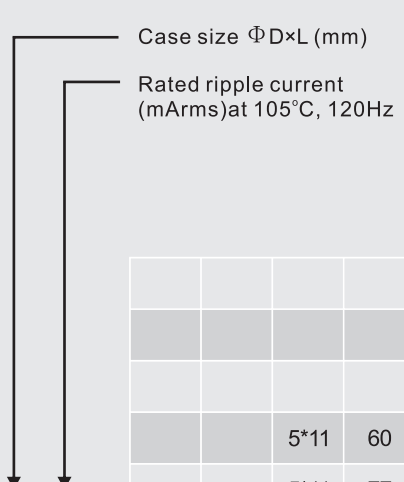


Body Dia ΦD	5	6	8	10	13		16	18
					L ≤ 21	L ≥ 25		
Lead Dia Φd	0.5			0.6	0.6	0.8	0.8	0.8
Lead Space A	2	2.5	3.5	5		7.5		7.5/10



● STANDARD RATING

μF \ Vdc	6.3v		10v		16v		25v		35v		50v		63v		100v		
	0.1											5*11	1.3	5*11	1.9	5*11	2.6
0.22											5*11	2.9	5*11	3.6	5*11	5.8	
0.33											5*11	4.4	5*11	5.6	5*11	7.8	
0.47											5*11	7.0	5*11	8.0	5*11	10	
0.68											5*11	7.0	5*11	9.0	5*11	12	
0.82											5*11	9.0	5*11	12	5*11	13	
1.0											5*11	13	5*11	13	5*11	15	
2.2											5*11	20	5*11	20	5*11	23	
3.3											5*11	25	5*11	24	5*11	29	
4.7											5*11	30	5*11	32	5*11	34	
6.8							5*11	40	5*11	43	5*11	35	5*11	37	5*11	40	
10											5*11	46	5*11	50	6.3*11	56	
22							5*11	60	5*11	65	5*11	55 6.3*11	68	6.3*11	82	8*12	96
33					5*11	60	5*11	65	5*11	75	6.3*11	90	6.3*11	100	10*13	140	
47					5*11	77	5*11	82	6.3*11	100	6.3*11	110	8*12	135	10*17	180	
68	5*11	75	5*11	80	5*11	100	6.3*11	125	8*12	130	8*12	150	10*13	195	10*20	235	
100	5*11	95	5*11	105	6.3*11	125	6.3*11	135	6.3*11 8*12	150 170	8*12	180	8*14 10*17	195 225	10*20	320	
220	6.3*11	160	6.3*11	175	8*12	215	8*12	230	8*16 10*17	250 300	10*17	345	10*20	400	13*25	570	
330	6.3*11	195	8*12	245	8*12	260	8*16	335	10*17	400	10*20	460	13*20	540	16*25	700	
470	8*12	270	8*12	290	8*14	370	8*16 10*17	395 440	10*20	520	13*21	610	13*21 13*25	630 700	16*32	880	
680	8*12	320	8*16	400	8*16	500	10*17	650	13*20	700	13*25	850	16*25	1000	16*36	1150	
1000	8*12	460	10*17	550	8*20 10*20	590 640	10*20	770	13*21 13*25	790 920	13*25	1080	16*35	1210			
1650	10*17	650	10*20	800	10*25	910	13*25	1010	16*25	1150	16*32	1350	16*36	1400			
2200	10*20	810	10*20 10*25	860 920	10*30 13*25	960 1000	13*25	1170	16*25 16*32	1250 1350	18*32	1530	22*30	1780			
3300	13*21	960	10*30 13*25	1050 1100	13*30	1300	16*25 16*32	1390 1460	18*32	1650							
4700	13*21	1330	10*30 13*30	1300 1400	13*34 16*32	1460 1600	18*36	1780	18*40	1900							
6800	16*25	1500	13*40 16*32	1510 1690	18*36	1900	18*40	1950									
10000	16*25	1765	18*36	1950	18*40	2060											
15000	18*33	2075															



Chip Type SMD
Miniature Type
General Purpose
High Frequency Low Impedance
High Voltage High Reliability
Non-polar Type
Large Size Snap-in
Large Size Screw
X Metallized Polypropylene Film Capacitors

Ripple Current : mA/rms at 120Hz 105°C