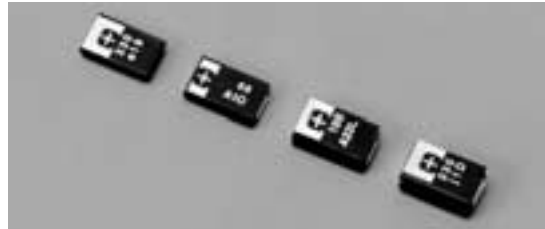


TH Series

125°C Guaranteed Products (THB/THC/THD/THE series)

TH series has 125 °C capability guaranteed. It is most suitable for the high reliability industrial equipment.



Specifications

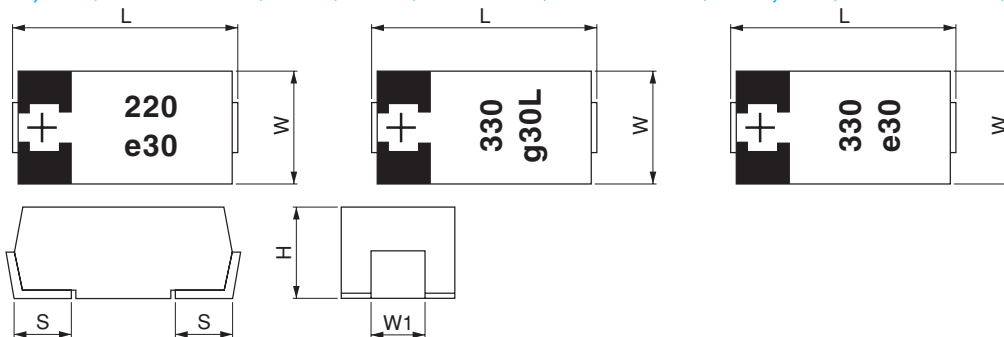
Series		THB	THC	THD	THE
Operating Temperature range (°C)		-55 to +125			
Rated capacitance range (120Hz/20°C) (μF)		100 to 1000	68 to 220	330 to 680	150 to 330
Capacitance tolerance (120Hz/20°C)		M:±20%			
Rated voltage (V.DC)		2.5 to 10	2.5 to 10	2.5 to 6.3	2.5 to 6.3
Dissipation Factor (D.F.) (120Hz/20°C) (%)		≤8.0 or 10.0 or 15.0	≤10.0	≤10.0	≤10.0
Leakage current (Rated voltage applied, after 5 minutes) (μA)		≤0.1CV			
Equivalent series resistance E.S.R (mΩmax.) , (100kHz/20°C)		Please see the attached characteristic list			
Temperature characteristics of Impedance ratio (100kHz/+20°C)		-55°C	Z/Z _{20°C}		1.0 to 2.0
		+125°C	Z/Z _{20°C}		0.6 to 1.0
Endurance (125°C,1000h,category voltage applied)		ΔC/C		Within±20% of the initial value	
		D.F.		≤2 times the initial limit	
		L.C.		≤2 times the initial limit	
Damp heat (Steady state) (60°C,90 to 95%RH,500h,No voltage applied)		ΔC/C		Within+50%, -20% of the initial value (2R5THB1000M) Within+40%, -20% of the initial value (Except for the above model)	
		D.F.		≤1.5 times the initial limit	
		L.C.		≤3 times the initial limit	
Surge (105°C,1000 cycles,1kΩdischarge resistance,surge voltage applied)		ΔC/C		Within±5% of the initial value	
		D.F.		≤The initial limit	
		L.C.		≤3 times the initial limit	

Dimensions (unit: mm)

(D2,D4 (THB series) size)

(D3L size)

(D2E,D4 (THD series) size)



Size List

μF	Series	RV (sv)					μF	Series	RV (sv)				
		2.5 (3.2)	4.0 (5.0)	6.3 (8.0)	10.0 (13.0)				2.5 (3.2)	4.0 (5.0)	6.3 (8.0)	10.0 (13.0)	
68	THC				D2	330	THB	D3L	D3L	D4	D4		
100	THB				D3L		THD			D4			
150	THC			D2		470	THE	D2E					
	THE			D2E			THB	D3L		D4			
220	THB			D3L	D4	680	THD		D4				
	THC	D2	D2				THB	D4	D4				
	THE		D2E				THD	D4					
						1000	THB	D4					

Size code	L*1 (±0.3)	W (±0.2)	H*2 (±0.1)	S (±0.2)	W1 (±0.1)
D2E	7.3	4.3	1.8	1.3	2.4
D2	7.3	4.3	1.9	1.3	2.4
D3L	7.3	4.3	2.8	1.3	2.4
D4	7.3	4.3	3.8	1.3	2.4

※1 ±0.2:D2
※2 ±0.2:D3L,D4

TH Series

Characteristics list

Series	Size Code	SANYO Part number	Rated Voltage (V)	Rated Temperature (°C)	Category Voltage (V)	Category Temperature (°C)	Rated Capacitance (μF)	D.F. (%max.)	L.C. (μA) max./5min.	E.S.R. (mΩmax.) 100kHz/20°C	Maximum allowable ripple current (mA)rms 100kHz ^{*1}	
THB	D3L	10THB100ML	10.0	105	6.3	125	100	8.0	100	55	1900	
		6THB220ML	6.3	105	4.0	125	220	10.0	138.6	40	2000	
		4THB330ML	4.0	105	2.5	125	330	10.0	132	40	2000	
		2R5THB330ML	2.5	105	1.6	125	330	8.0	82.5	55	1900	
		2R5THB470ML	2.5	105	1.6	125	470	10.0	117.5	40	2000	
	D4	10THB220M	10.0	105	6.3	125	220	10.0	220	40	3000	
		10THB330M	10.0	105	6.3	125	330	10.0	330	35	3000	
		6THB330M	6.3	105	4.0	125	330	10.0	207.9	40	3000	
		6THB470M	6.3	105	4.0	125	470	15.0	296.1	35	3000	
		4THB680M	4.0	105	2.5	125	680	15.0	272	35	3000	
		2R5THB680M	2.5	105	1.6	125	680	10.0	170	40	3000	
		2R5THB1000M	2.5	105	1.6	125	1000	15.0	250	30	3000	
	THC	D2	10THC68M	10.0	105	6.3	125	68	10.0	68	45	1700
			6THC150M	6.3	105	4.0	125	150	10.0	94.5	40	1900
4THC220M			4.0	105	2.5	125	220	10.0	88	40	1900	
2R5THC220M			2.5	105	1.6	125	220	10.0	55	45	1700	
THE	D2E	6THE150M	6.3	105	4.0	125	150	10.0	94.5	25	2400	
		6THE150MI								18	2800	
		4THE220M	4.0	105	2.5	125	220	10.0	88	25	2400	
		4THE220MI								18	2800	
		4THE220MF								15	3100	
		2R5THE330M	2.5	105	1.6	125	330	10.0	82.5	25	2400	
		2R5THE330MI								18	2800	
		2R5THE330MF								15	3100	
THD	D4	6THD330M	6.3	105	4.0	125	330	10.0	207.9	10	4400	
		4THD470M	4.0	105	2.5	125	470	10.0	188	10	4400	
		2R5THD680M	2.5	105	1.6	125	680	10.0	170	10	4400	

*1: 100k to 500kHz, 45°C