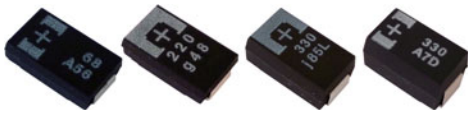
Surface Mount Type

Series : **TH**

POSCAP



Features

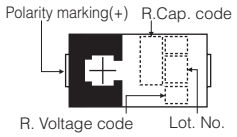
- Guaranteed at 125 °C, 1000h
- RoHS compliance, Halogen free

Specifications

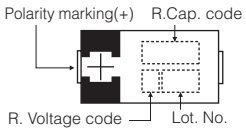
Size code	D2E	D2	D3L	D4
Category temperature range	–55 °C to +125 °C			
Rated voltage range	2.5 V.DC to 6.3 V.DC	2.5 V.DC to 10 V.DC	4 V.DC to 6.3 V.DC	6.3 V.DC to 10 V.DC
Category voltage range	1.6 V.DC to 4.0 V.DC	1.6 V.DC to 6.3 V.DC	2.5 V.DC to 4.0 V.DC	4.0 V.DC to 6.3 V.DC
Rated capacitance range	150 µF to 330 µF	68 µF to 220 µF	220 µF to 330 µF	220 µF to 470 µF
Capacitance tolerance	±20 % (120 Hz / + 20 °C)			
Leakage current	Please see the attached characteristics list			
Dissipation factor (tan δ)	Please see the attached characteristics list			
Surge voltage (V.DC)	Rated voltage × 1.15			
Endurance	+125 °C 1000h, category voltage appled			
	Capacitance change	Within ±20 % of the initial value		
	tan δ	≦ 2 times of the initial limit		
	DC leakage current	≦ 2 times of the initial limit		
Damp heat (Steady State)	+60 °C, 90 % to 95 %, 500 h, No-applied voltage			
	Capacitance change	Within +40 %, –20 % of the initial value		
	tan δ	≦ 1.5 times of the initial limit		
	DC leakage current	≦ 3 times of the initial limit		

Marking

D2E, D3L Size

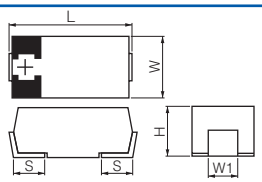


D2, D4 Size



R. Voltage (V.DC)	2.5	4.0	6.3	10
Code	e	g	j	A

Dimensions (not to scale)



Unit : mm

Size code	L±0.3*1	W±0.2	H±0.1*2	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

✻ Externals of figure are the reference. ✻ 1 ±0.2 : D2 ✻ 2 ±0.2 :D3L, D4

Characteristics list

Series	Rated voltage (V.DC)	Rated temp. (°C)	Category voltage (V.DC)	Category temp. (°C)	Rated capacitance (µF)	Case size (mm) L	W	H	Size code	Specifications Ripple *1 current (mArr.m.s.)	ESR *2 (mΩ max.)	tan δ *3	LC *4 (µA)	Standard Part number	Min. Packaging Q'ty (pcs)
THB	4.0	105	2.5	125	330	7.3	4.3	2.8	D3L	2000	40	0.10	132.0	4THB330ML	2500
	6.3	105	4.0	125	220	7.3	4.3	2.8	D3L	2000	40	0.10	138.6	6THB220ML	2500
		105	4.0	125	330	7.3	4.3	3.8	D4	3000	40	0.10	207.9	6THB330M	2000
		105	4.0	125	470	7.3	4.3	3.8	D4	3000	35	0.10	296.1	6THB470M	2000
	10	105	6.3	125	220	7.3	4.3	3.8	D4	3000	40	0.10	220.0	10THB220M	2000
		105	6.3	125	330	7.3	4.3	3.8	D4	3000	35	0.10	330.0	10THB330M	2000
THC	2.5	105	1.6	125	220	7.3	4.3	1.9	D2	1700	45	0.10	55.0	2R5THC220M	3000
	6.3	105	4.0	125	150	7.3	4.3	1.9	D2	1900	40	0.10	94.5	6THC150M	3000
	10	105	6.3	125	68	7.3	4.3	1.9	D2	1700	45	0.10	68.0	10THC68M	3000
THE	2.5	105	1.6	125	330	7.3	4.3	1.8	D2E	3100	15	0.10	82.5	2R5THE330MF	3000
		105	1.6	125		7.3	4.3	1.8	D2E	2800	18	0.10	82.5	2R5THE330MI	3000
		105	1.6	125		7.3	4.3	1.8	D2E	2400	25	0.10	82.5	2R5THE330M	3000
	4.0	105	2.5	125	220	7.3	4.3	1.8	D2E	3100	15	0.10	88.0	4THE220MF	3000
		105	2.5	125		7.3	4.3	1.8	D2E	2800	18	0.10	88.0	4THE220MI	3000
		105	2.5	125		7.3	4.3	1.8	D2E	2400	25	0.10	88.0	4THE220M	3000
	6.3	105	4.0	125	150	7.3	4.3	1.8	D2E	2800	18	0.10	94.5	6THE150MI	3000
		105	4.0	125		7.3	4.3	1.8	D2E	2400	25	0.10	94.5	6THE150M	3000

✻1 Ripple current (100 kHz/ +45 °C), ✻2 ESR (100 kHz/+20 °C) ✻3 tan δ (120 Hz/+20 °C) ✻4 After 5 minutes

◆ Please refer to each page in this catarog for “Reflow conditions” and “Taping specifications”.