

## Surface Mount Type

# POSCAP

### Series : TH



### 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 applied			
	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)			Size code	Specifications				Standard		Floor life			
						L	W	H		Ripple*1 current (mA r.m.s.)	ESR*2 (mΩ max.)	tan δ*3	LC*4 (μA)	Part number	Min. Packaging Qty (pcs)	Reflow Temp ≤260°C	Reflow Temp ≤250°C		
THB	4.0	105	2.5	125	330	7.3	4.3	2.8	D3L	2000	40	0.10	132.0	4THB330ML	2500	-	5		
										2000	40	0.10	138.6	6THB220ML	2500				
	6.3	105	4.0	125	330	7.3	4.3	3.8		D4	3000	40	0.10	207.9	6THB330M			2000	
											3000	35	0.10	296.1	6THB470M			2000	
	10	105	6.3	125	220	7.3	4.3	3.8			D2	3000	40	0.10	220.0			10THB220M	2000
												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
												1900	40	0.10	94.5			6THC150M	3000
										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
											2800	18	0.10	82.5	2R5THE330MI			3000	
											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			
											2800	18	0.10	88.0	4THE220MI	3000			
											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		
												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 catalog for "Reflow conditions" and "Taping specifications".

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