# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



POSCAP

### Surface Mount Type

Series : **TH** 

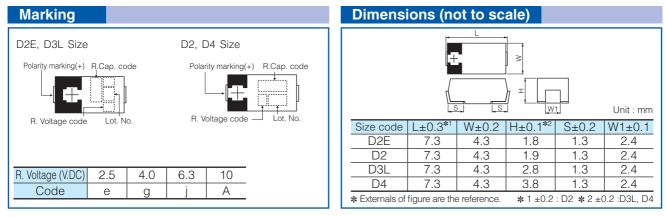
#### Features

• Guaranteed at 125 °C, 1000h

• RoHS compliance, Halogen free

#### Specifications

opeometations											
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		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 $\delta$ )	Please see the attached characteristics list										
Surge voltage (V.DC)	Rated voltage × 1.15										
	+125 °C 1000h, category voltage appled										
Endurance	Capacitance change Within ±20 % of the initial value										
	tan $\delta$ $\leq$ 2 times of the initial limit										
	DC leakage current ≤ 2 times of the initial limit										
	+60 °C, 90 % to 95 %, 500 h, No-applied voltage										
Damp heat	Capacitance change Within +40 %, -20 % of the initial value										
(Steady State)	tan $\delta$	≤ 1.5 times of the initial limit									
	DC leakage current	leakage current ≤ 3 times of the initial limit									



#### **Characteristics list**

	Rated voltage (V.DC)	temp. voltage	Cotogory		Rated capacitance (µF)	Case size (mm)			Specifications				Standard		
Series			voltage (V.DC)			L	W	Н	Size code	Ripple *1 current (mAr.m.s.)	ESR *2 (mΩ max.)	tan $\delta^{*^3}$	LC *4 (µA)	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.	4.3	2.8	DSL	2000	40	0.10	138.6	6THB220ML	2500
		105	4.0	125	330 470	7.3	4.3	3.8	D4	3000	40	0.10	207.9	6THB330M	2000
		105	4.0	125		7.3	4.3	3.8		3000	35	0.10	296.1	6THB470M	2000
	10 -	105	6.3	125	220	-	4.3	3.8		3000	40	0.10	220.0	10THB220M	2000
		105	6.3	125	330		4.3	3.8		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		1900	40	0.10	94.5	6THC150M	3000
	10	105	6.3	125	68	7.3	4.3	1.9		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		2800	18	0.10	82.5	2R5THE330MI	3000
		105	1.6	125		7.3	4.3	1.8		2400	25	0.10	82.5	2R5THE330M	3000
	4.0	105	2.5	125	220	7.3	4.3	1.8		3100	15	0.10	88.0	4THE220MF	3000
		105	2.5	125		7.3	4.3	1.8		2800	18	0.10	88.0	4THE220MI	3000
		105	2.5	125		7.3	4.3	1.8		2400	25	0.10	88.0	4THE220M	3000
	6.3	105	4.0	125		7.3	4.3	1.8		2800	18	0.10	94.5	6THE150MI	3000
		105	4.0	125		7.3	4.3	1.8		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".

Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use Should a safety concern arise regarding this product, please be sure to contact us immediately.