

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!



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#### Hermetically Sealed Axial Lead Solid Tantalum Capacitors



The Type THF is ideal for use in switching regulators and high frequency power supplies because of its high ripple current and low ESR capabilities. It is an axial lead solid tantalum capacitor constructed with a rugged hermetically sealed metal case, insulated with an outer polyester wrap. The THF assures a small case size for high capacitance, and is extremely stable over the rated temperature range.

#### Highlights ———

- High Ripple Current
- Low ESR
- Lower Impedance at High Frequency
- Extremely Stable Capacitance
- Long Life
- Moisture & Solvent Resistant
- Small Size

#### **Specifications**

Capacitance Range: 5.6 µF to 330 µF

Voltage Range: 6 WVdc to 50 WVdc @ 85 °C

Capacitance Tolerance: -55 °C to +125 °C (With proper derating)

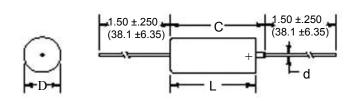
**Operating Temperature:** ±10% (K), ±20% (M)

At +25 °C - (See Ratings)

DC Leakage: At +85 °C - 10 x Ratings limit

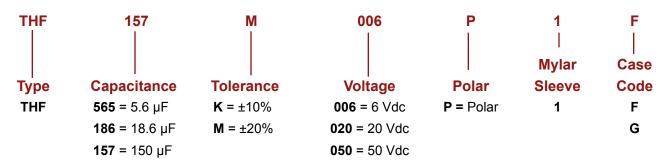
At +125 °C - 12.5 x Ratings limit

#### **Outline Drawing** -



	Uninsulated		Insu	ılated	Inches (mm)			
	D	L	D	L		d	Quantity	
Case	±.005	±.031	±.010	±.031	С	±.001	Per	
Code	(±.13)	(±.79)	(±.25)	(±.79)	Maximum	(±.03)	Reel	
F	.279(7.09)	.650(16.51)	.289(7.34)	.686(17.42)	.822(20.88)	.025(.64)	500	
G	.341(8.66)	.750(19.05)	.351(8.92)	.786(19.96)	.922(23.42)	.025(.64)	400	

#### **Part Numbering System**



# **Type THF Solid Tantalum Capacitors**

## **Ratings**

			Max	Max	Max	Max Ripple						
	Catalog	Case	DCL	DF %	ESR (ohms)	RMS Amps						
Сар	Part Number	Code	@ +25 °C	@ +25 °C	@ +25 °C	@ 40 kHz						
(μF)	T dit Number	Oouc	(μA)	1 kz	100 kHz	+25°C						
(μι )	<u> </u>		6 WVdc @ 8	l l	TOO KITZ	123 0						
4 WVdc @ 125 °C												
150	THF157K006P1F	F	4.5	10	0.065	3.3						
180	THF187K006P1F	F	5.5	10	0.060	3.4						
270	THF277K006P1G	G	6.5	10	0.050	4.1						
330	THF337K006P1G	G	7.5	12	0.045	4.3						
10 WVdc @ 85 °C												
7 WVdc @ 125 °C												
82	THF826K010P1F	F	4	8	0.085	2.9						
100	THF107K010P1F	F	5	8	0.075	3.0						
120	THF127K010P1F	F	6	8	0.070	3.2						
180	THF187K010P1G	G	9	8	0.060	3.7						
220	THF227K010P1G	G	10	10	0.055	3.9						
15 WVdc @ 85 °C												
	<b>————</b>		0 WVdc @ 1									
56	THF566K015P1F	F	4	6	0.100	2.6						
68	THF686K015P1F	F	5	6	0.095	2.7						
120	THF127K015P1G	G	9	8	0.070	3.5						
150	THF157K015P1G	G	10	8	0.065	3.6						
20 WVdc @ 85 °C												
0.7	TUE0701/000D4E		3 WVdc @ 1		0.445	0.0						
27	THF276K020P1F	F	2.5	5	0.145	2.2						
33	THF336K020P1F	F	3.5	5	0.130	2.3						
39	THF396K020P1F	F F	4.0	5	0.120	2.4						
47	THF476K020P1F		4.5	6	0.110	2.5						
56	THF566K020P1G	G	5.5	6 6	0.100	2.9						
68 82	THF686K020P1G	G	7.0	6	0.095 0.085	3.0						
100	THF826K020P1G THF107K020P1G	G G	8.0 10.0	8	0.065	3.1 3.3						
100	I THE TO / KUZUP IG		10.0 85 WVdc @ 8		0.075	ა.ა						
			3 WVdc @ 1									
10	THF106K035P1F	F	4.0	4	0.161	1.5						
22	THF226K035P1F	F	4.0	4	0.160	2.1						
27	THF276K035P1G	G	4.5	4	0.145	2.4						
33	THF336K035P1G	G	5.5	5	0.130	2.5						
39	THF396K035P1G	G	7.0	5	0.120	2.6						
47	THF476K035P1G	G	8.0	5	0.110	2.7						
		5	50 WVdc @ 8	55 °C								
		3	3 WVdc @ 1	25 °C								
5.6	THF565K050P1F	F	2.2	3	0.300	1.5						
6.8	THF685K050P1F	F	2.2	3	0.275	1.6						
8.2	THF825K050P1F	F	2.5	3	0.250	1.6						
10.0	THF106K050P1F	F	2.5	3	0.230	1.7						
12.0	THF126K050P1F	F	3.0	3	0.210	1.8						
15.0	THF156K050P1F	F	4.0	3	0.190	1.9						
18.0	THF186K050P1F	F	4.5	4	0.175	2.0						
22.0	THF226K050P1G	G	5.5	4	0.160	2.3						

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