



THC2W High Energy Tantalum Hybrid Capacitor
(Hermetic sealed & Military standard)



❖ **Feature and Applications**

- All tantalum case, laser welding hermetic sealed, Cylindrical, radial leads, polarized;
- With screws, convenient to fix;
- This product is made up of tantalum capacitor and electrochemical capacitor, small size with big capacitance.
- Stable electric performance, high reliability, long life, large energy density per unit volume,
- Used as battery in energy conversion circuit and power pulse circuit, Perform energy storage, filter, power-off delay in circuit. Widely use in aircraft, radar, ship, tank, satellite, aerospace equipment etc.
- Standard: GJB733A-96, QJ/PWV304-2008

❖ **How to order: THC2W-63V8000μF-M: 100pcs**

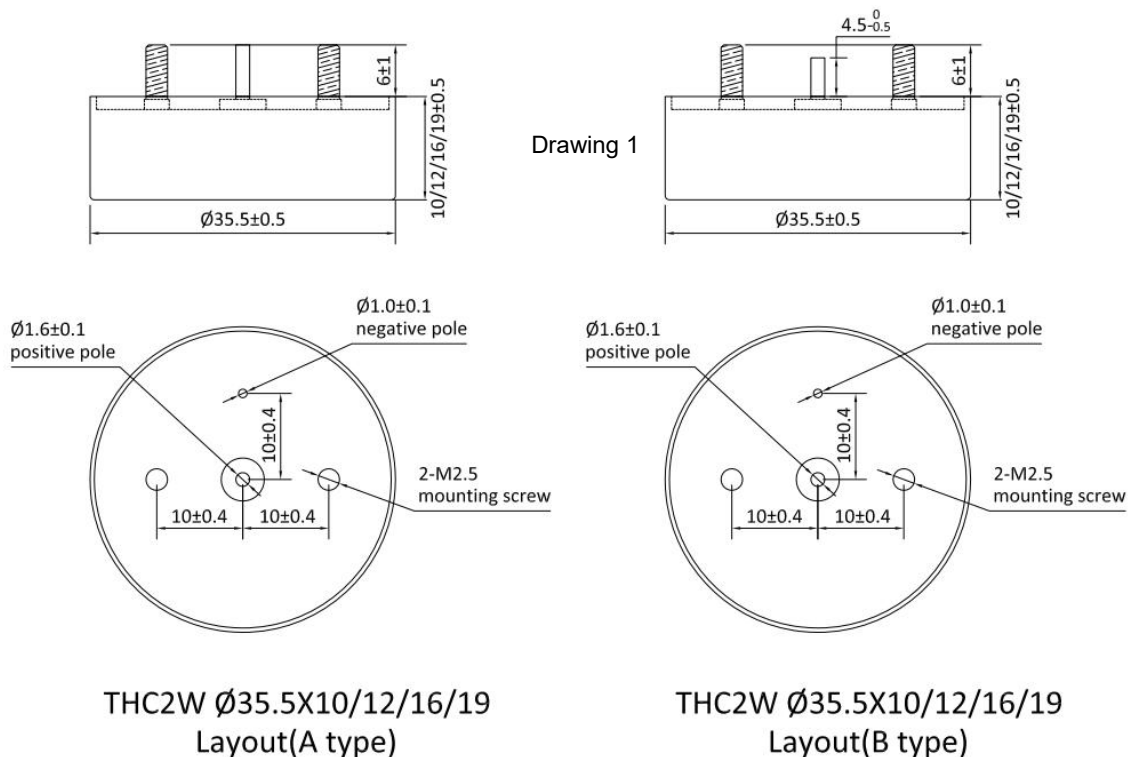
❖ **Technical Performance**

Temperature range: -55°C~+125°C (+125°C use derated voltage)

Store environment temperature: -62°C~+130°C

Capacitance tolerance: K=±10%, M=±20%, Q=-10%~+30%

❖ **Outline and installation dimensions. Drawing 1 (mm)**





❖ Table 1 THC2W High Energy Tantalum Hybrid Capacitor's Characteristics. Size see Drawing 1

Rated Voltage (V)	Derated Voltage (V)	Surge Voltage (V)	Cap. (μ F)	tg δ (%) 100Hz	ESR 1KHz (Ω)	Max.DCL. (μ A)		IMP. (Ω) 100Hz -55 $^{\circ}$ C	Cap. Change (%)		Size DxH (mm)	Weight (g)
						25 $^{\circ}$ C	85 $^{\circ}$ C 125 $^{\circ}$ C		-55 $^{\circ}$ C	+85 $^{\circ}$ C		
10	6	11	100000	180	0.035	300	1800	1.0	-80	+160	35.5x12	75
			150000	180	0.025	300	1800	1.0	-80	+160	35.5x16	100
16	9.5	17.6	60000	165	0.035	300	1800	1.0	-80	+160	35.5x12	75
			90000	165	0.025	300	1800	1.0	-80	+160	35.5x16	100
25	15	27.5	36000	130	0.04	300	1800	1.0	-75	+160	35.5x12	75
			54000	130	0.035	300	1800	1.0	-75	+160	35.5x16	100
35	20	38.5	24000	95	0.04	300	1800	1.0	-70	+160	35.5x12	75
			36000	95	0.035	300	1800	1.0	-70	+160	35.5x16	100
50	30	55	11000	65	0.1	300	2400	1.2	-60	+120	35.5x10	58
			12000	65	0.1	300	2400	1.2	-60	+120	35.5x12	75
			16000	70	0.04	400	2400	1.2	-55	+135	35.5x12	75
			18000	70	0.04	400	2400	1.2	-55	+135	35.5x12	75
			24000	70	0.035	400	2400	1.2	-55	+135	35.5x16	100
63	38	70	8000	50	0.04	400	2400	1.4	45	+90	35.5x12	75
			12000	50	0.035	400	2400	1.4	-45	+90	35.5x16	100
80	48	88	5600	40	0.06	500	3000	1.6	-40	+90	35.5x12	75
			8200	40	0.04	500	3000	1.6	-40	+90	35.5x16	100
100	60	110	2400	35	0.08	500	3000	1.8	-30	+80	35.5x12	75
			3600	35	0.05	500	3000	1.8	-30	+80	35.5x12	75
			3800	35	0.05	500	3000	1.8	-30	+80	35.5x16	110
			5700	35	0.05	500	3000	1.8	-30	+80	35.5x16	110
110	66	121	1200	35	0.08	500	3000	2.0	-25	+60	35.5x12	75
			1800	35	0.075	500	3000	2.0	-25	+60	35.5x16	100
			3000	35	0.075	500	3000	2.0	-25	+60	35.5x16	100
			4500	35	0.075	500	3000	2.0	-25	+60	35.5x16	110
125	75	138	1100	30	0.08	500	3000	2.4	-25	+50	35.5x12	80
			1600	30	0.075	500	3000	2.4	-25	+50	35.5x16	110
			2200	30	0.075	500	3000	2.4	-25	+50	35.5x12	80
			3300	30	0.05	500	3000	2.4	-25	+50	35.5x16	110
			3300	30	0.05	500	3000	2.2	-20	+45	35.5x19	140

❖ Notes:

- 1, Tantalum capacitors can't been measured by multimeter (Easily cause irreversible damage and lead to reject)
- 2, Capacitance, DF measure frequency: 100Hz,DC offset voltage $U_{-}=2.2^{0}_{-1.0}V$, Exchange offset voltage $U_{-}=1.0^{0}_{-0.5}V$ (effective value), measure method is by series equivalent circuit.
- 3, Measure the leakage current above 125 $^{\circ}$ C, please use derated voltage. DCL. value read at 5 minute.
- 4, Special size and big capacitance products, please consult with GTCAP.