

HCA39H Series Reliability Index Hermetically Wet Tantalum Capacitors

◆Features:

1. This product is a full tantalum structure, hermetic, cylindrical, axially drawn, polarized capacitor, with excellent electrical properties.
2. Small size, large capacity, high reliability, long life, and can withstand large ripple currents.

◆Application:

Suitable for aerospace, aviation, weapons, ships, electronics and other fields, for spaceships, satellites, aircraft, missiles and other national defense weapons and equipment, suitable for DC or pulsating circuits of electronic equipment with reliability requirements, especially suitable for capacitor volume in the aerospace field. A small overall device is required.



◆Specifications:

1. Operating temperature range: - 55°C ~ + 125°C
2. Can withstand 1.5V reverse voltage, strong anti-radiation ability
3. Capacity tolerance: K: ± 10% M: ± 20%
4. Electrical performance parameters such as leakage current, ESR, and low temperature resistance are shown in Table 2
5. Outline structure and installation dimensions: see Figure 1 and Table

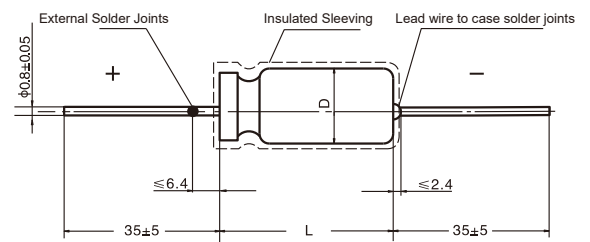


Figure 1

◆How to order:

<u>HCA39H</u>	<u>687</u>	<u>050</u>	<u>K</u>	<u>R</u>	<u>0800</u>
↓	↓	↓	↓	↓	↓
<u>Type</u>	<u>Capacitance code</u>	<u>Rated DC Voltage</u>	<u>Tolerance</u>	<u>Package</u>	<u>ESR in mΩ</u>
HCA39H	pF Code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow) 106 = 10uF 476 = 47uF	Code 035:35VDC 006 = 6.3VDC 010 = 10VDC 025 = 25VDC 035 = 35VDC 050=50VDC	K: +/- 10% M: +/-20%	R: Tape & Reel	

Table 1 Dimensions and Maximum Weight of Capacitors

Case Code	Max Weight (g)	Without insulating sleeve	
		D±0.4(mm)	L _{-0.4} ^{+0.8} (mm)
T1	3.0	4.78	11.51
T2	7.0	7.14	16.28
T3	12.0	9.52	19.46
T4	18.0	9.52	26.97
L4	22.0	9.90	30.0

Note: After the outer shell is covered with insulating sleeve, the diameter increases by 0.4mm max and the length L increases by 1.6mm max.

Table 2 Rated voltage, nominal capacitance and main characteristics

Rated voltage (V)	Nominal capacitance (μF)	Case Code	Leakage current(μA)max		Impedance max	Tg δ max(%)100Hz	Capacitance change(%)			ESR(Ω)max 100Hz	85°C 40kHz Maximum AC Ripple Current (mA)
			25°C max	85°C 125°C	(Ω) 100Hz		25°C	-55°C	85°C		
					-55°C						
15	150	T1	2	12	30	40	-55	+30	+40	1.4	1400
	680	T2	6	36	13	64	-70	+30	+50	1.1	2200
	1500	T3	12	70	12	85	-80	+40	+60	0.9	2700
	2200	T4	20	120	7	100	-85	+40	+60	0.7	3400
25	120	T1	1	5	25	30	-42	+16	+24	1.3	1250
	560	T2	2	10	12	100	-65	+24	+30	1.0	2100
	1200	T3	5	20	7	125	-70	+24	+36	0.8	2600
	1800	T4	6	25	7	135	-72	+24	+40	0.5	3100
30	100	T1	1	5	30	30	-38	+16	+24	1.6	1200
	470	T2	2	10	18	70	-65	+20	+36	1.1	1800
	1000	T3	7	25	12	100	-70	+20	+36	1.0	2500
	1500	T4	12	35	8	115	-72	+20	+40	0.9	3000
50	68	T1	1	5	35	20	-25	+12	+30	1.8	1050
	220	T2	2	10	18	50	-50	+12	+30	1.2	1800
	470	T3	3	25	14	70	-45	+12	+30	1.1	2100
		T4	5	40	9	50	-58	+20	+40	1.0	2750
60	47	T1	1	5	45	15	-25	+10	+24	2.3	1050
	150	T2	2	10	21	25	-40	+10	+24	1.4	1800
	390	T3	3	25	15	50	-45	+10	+24	1.2	2100
	560	T3	10	40	20	80	-60	+25	+70	1.0	2150
	560	T4	5	40	11	35	-58	+10	+24	1.1	2750
63	47	T1	1	5	45	15	-25	+10	+24	2.3	1050
	150	T2	2	10	21	25	-40	+10	+24	1.4	1800
	390	T3	3	25	15	50	-45	+10	+24	1.2	2100
	560	T3	10	40	20	80	-60	+25	+70	1.0	2150
	470	T4	5	40	15	30	-50	+8	+20	1.1	2600
	560	T4	5	40	11	35	-58	+10	+24	1.1	2750
	470	L4	5	32	14	25	-40	+5	+15	1.0	2750
	680	L4	10	60	18	20	-58	+10	+25	0.8	2800
75	33	T1	1	5	55	10	-25	+9	+18	2.8	1050
	110	T2	2	10	35	20	-35	+10	+20	1.6	1650
	330	T3	3	30	21	40	-45	+10	+20	1.3	2100
	470	T4	5	50	13	35	-50	+10	+20	1.2	2750
100	15	T1	1	5	120	10	-18	+3	+10	4.0	1050
	68	T2	2	10	40	20	-30	+4	+12	2.4	1650
	150	T3	3	25	28	25	-35	+6	+12	1.9	2100
	220	T4	5	50	21	35	-40	+6	+12	1.5	2750
	330	L4	10	120	12	20	-45	+10	+20	0.7	2800
125	10	T1	1	5	180	10	-15	+3	+10	6.0	1050
	47	T2	2	10	55	10	-25	+5	+12	2.8	1650
	100	T3	3	25	55	20	-35	+5	+12	2.1	2100
	150	T4	5	50	21	30	-35	+6	+12	1.9	2750
150	100	L4	12	150	40	30	-45	+6	+10	1.5	2600

P.S.: 1. It is forbidden to use a multimeter to measure tantalum capacitors regardless of polarity

2. The test frequency of capacitance and loss tangent is 100Hz, $U_{-}=2.20_{-1.0}^{0.0}$ V, $U_{-}=1.0_{-0.5}^{0.0}$ V (effective value): the measurement method adopts series equivalent circuit

3. When measuring the leakage current at 125°C, please apply the category voltage: the leakage current parameter is a 5-minute reading

4. Products with large capacity or special sizes exceeding the standard can be negotiated with our company for production

5. The unit of this model is millimeter (mm)