

HCA351 Series Hermetically Military Wet Tantalum Capacitors

◆Features:

1. Silver shell package, gas seal, cylindrical, axial discharge, jacket insulation sleeve, polarity
2. Excellent electrical performance, stable and reliable, with good resistance to harsh environment and storage performance
3. Small size, rated voltage and nominal capacitance range are wider
4. Execution standard: QJ/PWV131-2002



◆Application:

Suitable for DC or pulse circuit for communication, instrumentation and other electronic equipment

◆Technical Specifications:

1. Operating temperature range: -55°C~125°C (when >85°C, apply category voltage)
2. Rated voltage, category voltage and nominal capacitance see Table 2
3. Capacitance tolerance: K: ±10%; M: ±20%
4. Room temperature DC leakage current : $I_0 \leq 0.0008C_R U_R$ (µA) or 1µA (Max)
5. High temperature DC leakage current : $I \leq 0.006C_R U_R$ (µA) (85°C、125°C)
6. Loss Angle tangent (tgδ): see Table 2;
7. Minus temperature (-55°C) impedance: see Table 2;
8. Dimensions and Max weight: see Figure 1 and Table 1.

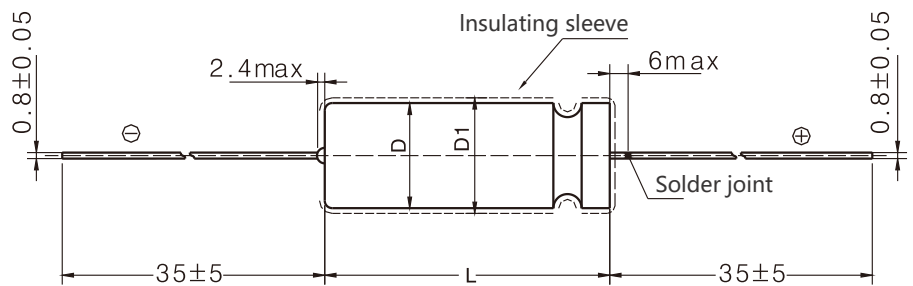


Figure1

◆ How to order

<u>HCA351</u>	<u>40V</u>	<u>680µF</u>	<u>K</u>
↓	↓	↓	↓
<u>Type</u>	<u>Rated DC Voltage</u>	<u>Capacitance</u>	<u>Tolerance</u>
HCA351			K: +/-10% M: +/-20%

Table 1. Dimensions (Unit: mm)

Case Code	Max Weight (g)	No Insulating sleeve	
		D ± 0.5 (mm)	L ± 2 (mm)
0	3	5	10
1	4	5	14
2	5	6	16
3	7	8	16
4	10	8	22
5	14	10	22
6	17	10	25
7	25	10	30

Note: After the jacket insulation sleeve, the diameter D shall be increased by 0.4mm and the length L shall be increased by 1.6mm.

Table 2.Dimensions (Unit: mm)

Rated voltage U _R (V)	Category voltage U _C (V)	Case code	Nominal Capacitance C _n (μF)	Tgδ (%) 25 °C 85 °C 125 °C	ESR (Ω) -55 °C 100HZ	Rated voltage U _R (V)	Category voltage U _C (V)	Case code	Nominal Capacitance C _n (μF)	Tgδ (%) 25 °C 85 °C 125 °C	ESR (Ω) -55 °C 100HZ	Rated voltage U _R (V)	Category voltage U _C (V)	Case code	Nominal Capacitance C _n (μF)	Tgδ (%) 25 °C 85 °C 125 °C	ESR (Ω) -55 °C 100HZ
6.3	4	0	22	6	150	16	10	2	120	18	65	40	25	7	1000	50	20
		0	33	8	100			2	150	18	60			0	5.0	5	450
		0	47	10	80			3	220	18	55			0	6.8	5	400
		0	68	15	60			3	270	25	50			0	10	5	250
		1	100	15	60			3	330	30	45			1	15	6	175
		1	150	20	50			4	390	35	40			1	22	8	140
		2	220	20	40			4	470	35	40			2	25	10	135
		2	270	30	40			5	540	45	35			2	33	12	135
		2	330	30	40			5	680	45	35			2	47	15	80
		3	470	40	40			6	820	55	30			3	60	15	50
		3	560	45	35			6	1000	65	30			3	68	20	45
		3	680	45	35			7	1500	70	25			3	82	20	45
		4	820	50	30			0	6.8	4.6	300			4	100	20	40
		4	1000	50	25			0	10	4.6	220			4	120	22	40
		5	1200	55	20			0	15	6.5	175			5	150	25	35
		6	1500	70	15			0	22	7	140			5	160	25	35
		7	2200	80	15			1	33	9	110			5	220	30	30
		10	6.3	0	15			6	200	25 (30)	16			1	47	9	80
0	22			6	175	2	68	9	70			6	330	38	22		
0	25			8	140	2	100	12	60			7	470	40	20		
0	33			10	125	3	150	14	55			7	680	45	20		
0	47			10	100	3	180	15	50			0	2.2	4	1100		
0	56			10	90	3	220	15	50			0	3.3	4.5	700		
1	68			12	80	4	270	20	45			0	4.0	5	600		
1	100			12	60	4	330	20	40			0	4.7	5	500		
1	120			18	60	5	470	30	30			0	6.8	5	350		
2	150			18	55	6	560	45	25			0	8.2	6	300		
2	180			20	50	6	680	45	25			1	10	6	260		
2	220			25	45	7	1000	45	20			1	15	6	175		
2	250			30	40	7	1200	50	18			2	22	8	140		
3	330			30	40	0	4.7	4.5	450			2	27	8	110		
3	390			30	40	0	6.8	4.5	350			2	33	8	90		
3	470			35	35	0	8.0	4.5	300			2	39	8	80		
4	560			40	32	0	10	4.5	260			3	47	8	70		
4	680			40	30	0	15	7	175			3	68	10	60		
5	850	50	28	1	22	7	140	4	100	12	50						
5	1000	50	25	1	33	8	110	5	150	15	45						
6	1200	55	25	2	40	8	90	6	220	20	40						
7	1500	55	18	2	47	8	80	7	270	25	30						
7	1800	70	15	2	56	10	75	7	330	30	22						
7	2200	80	10	2	68	10	75	7	470	30	20						
16	10	0	10	5.7	200	40	25	3	100	12	65	63	40	0	3.5	4.5	650
		0	15	5.7	155			4	150	15	50			0	4.7	4.5	450
		0	22	6	140			5	220	20	45			0	6.8	4.7	300
		0	33	8	90			6	330	25	35			1	10	6	200
		1	47	10	80			6	470	30	30			1	15	6	150
		1	68	15	75			7	560	35	25			2	22	8	130
		2	100	16	65			7	680	40	25			2	33	8	90

Table 2 (continued) Rated voltage, category voltage, nominal capacitance, case code and main characteristics

Rated voltage U_R (V)	Category voltage U_C (V)	Case code	Nominal Capacitance C_N (μ F)	$T_g \delta$ (%) 25 °C 85 °C 125 °C	ESR (Ω) -55 °C 100HZ
75	50	3	40	8	80
		3	47	8	70
		3	56	10	60
		4	68	10	55
		4	82	12	50
		5	100	12	40
		5	110	15	29
		6	150	15	25
		6	180	20	25
		7	220	25	22
		7	330	30	20
100	63	0	1.5	5	1400
		0	2.2	5	1100
		0	3.3	6	700
		0	4.7	6	500
		1	6.8	7	350
		1	10	8	250
		2	15	10	160
		2	22	10	120
		3	33	10	90
		4	39	10	70
		4	47	10	60
		5	68	10	60
		5	86	10	55
		6	100	12	50
		6	120	15	45
		7	150	20	35
		7	220	20	25

Rated voltage U_R (V)	Category voltage U_C (V)	Case code	Nominal Capacitance C_N (μ F)	$T_g \delta$ (%) 25 °C 85 °C 125 °C	ESR (Ω) -55 °C 100HZ
125	75	0	1.0	6	1800
		0	1.5	6	1400
		0	2.2	6	1100
		0	3.3	6	700
		1	4.7	6	500
		1	6.8	8	340
		2	10	9	250
		2	15	9	160
		3	18	9	150
		3	22	9	140
		4	27	10	120
		4	33	10	100
		5	47	10	70
		6	56	12	60
		6	68	12	50
		7	82	15	45
		7	100	20	35

Note:

1. The measurement frequency of capacitance and loss tangent is 100Hz, and the measurement method is equivalent series circuit, $U = 2.2^{+1.0}$, $U = 1.0^{+0.5}$ V (effective value);
2. When measuring 125°C leakage current, apply category voltage measurement;
3. It is prohibited to use a multimeter to measure giant capacitors regardless of polarity.
4. Special capacity or special size products exceeding this standard can be produced through consultation with our company.

Note: Specification is subject to change without further notice. For more details and updates, please visit our website.

No RoHS Compliant