KOME

CD294 Series

Snap-in Aluminium Electrolytic Capacitors

Features

- General-purpose standard series with a load life of 2000 hours at 105°C

TEMPERATURE FOR TABULATED VOLTAGES	TABULATED VOLTAGES	TABULATED CAPACITANCE	ENDURANCE
–25°C … +105°C	**400 – 450 V**	**82 – 680 μF**	**105°C 2000 h**

Case-size table entries only; see manufacturer-confirmation note on voltage range.

Specifications

Capacitance tolerance	±20% (120 Hz, 20°C)
Operating temperature range	10 ~ 250 V: –40 ~ +105°C 350 ~ 500 V: –25 ~ +105°C
Rated voltage range	10 ~ 250 V 350 ~ 500 V
Leakage current	I ≤ 3√CV or 3000 μA, whichever is greater, after 5 minutes' application of rated voltage
Load life	2000 hours, with application of rated voltage at 105°C. Capacitance change: Within ±20% of the initial value Dissipation factor: Not more than 200% of the initial specified value Leakage current: Not more than the initial specified value
Placement test	1000 hours, with application of rated voltage at 105°C (as printed on the original sheet, see notes). After the test, rated voltage is applied for 30 minutes, 24 to 48 hours before measurement. Capacitance change: Within ±20% of the initial value Dissipation factor: Not more than 200% of the initial specified value Leakage current: Not more than the initial specified value
Applicable standards	JIS C 5101-4-1 and JIS C 5101-2

Low-temperature characteristics

Rated voltage (V)	10	16	25	35	50	63 ~ 100	160 ~ 250	250 ~ 350
Z(–25°C)/Z(+20°C)	6	6	4	4	4	4	4	8
Z(–40°C)/Z(+20°C)	16	15	10	10	8	6	15	–

Maximum impedance ratio at 120 Hz. –: not given on the original sheet.

Ripple current frequency correction factor

Frequency	50 Hz	120 Hz	1 kHz	10 kHz	100 kHz
10 ~ 100 V	0.88	1.00	1.15	1.15	1.20
160 ~ 250 V	0.85	1.00	1.15	1.20	1.20
350 ~ 450 V	0.88	1.00	1.15	1.15	1.20

Dissipation factor (tan δ) at 20°C, 120 Hz

Rated voltage (V)	10	16	25	35	50	63	80	100	160 ~ 250	350 ~ 500
tan δ (max.)	0.45	0.40	0.35	0.30	0.25	0.25	0.20	0.20	0.15	0.20

Ripple current temperature correction factor

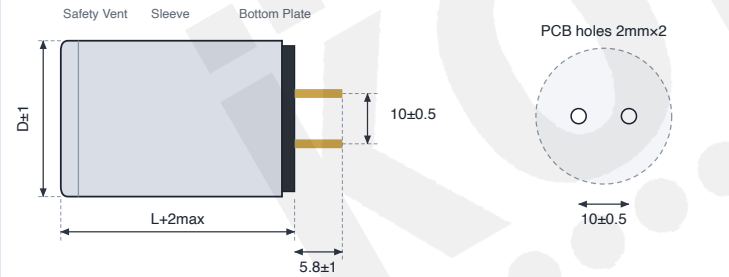
Ambient temperature (°C)	45	60	80	105
Correction factor	2.50	2.20	1.65	1.00

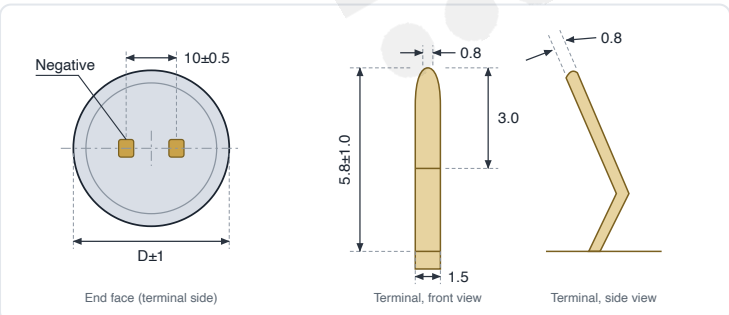
Standard ratings

μF \ V	400	450
82		22×25
100	22×25	22×30
120	22×30 25×25	22×35 25×25
150	22×35 25×30	22×40 25×30
180	22×40 25×35	22×45 25×35 30×25
220	22×45 25×40 30×25	22×50 25×40 30×30
270	22×50 25×45 30×30 35×25	25×45 30×35 35×25
330	25×50 30×35 35×30	25×50 30×40 35×30
390	30×40 35×35	30×45 35×35
470	30×45 35×40	30×50 35×40
560	30×50 35×45	35×45
680	35×50	35×50

Case size ΦD × L (mm). Full ratings in the characteristics list.

Dimensions





How to order

CD294	2	470	M	630	B	8X12
Series code	Number of characters for capacitance 47μF = 2, 470μF = 3, 4700μF = 4	Capacitance 47μF = 470, 3300μF = 332, 33000μF = 333	Capacitance tolerance M = ±20%, K = ±10%	Voltage code 6.3V = 6R3, 10V = 100, 63V = 630, 100V = 101	Package B: bulk pack, A: ammo pack	Size code

Example: CD2942470M630B8X12

Environmental

RoHS declaration (6/6) complies with the requirements of Directive 2002/95/EC, which stipulates the use of 100% Sn solder, gold plated or non-magnetic 100% Sn solder

RoHS | REACH

Applications

Computer | PC power | Measuring instruments | Telecom infrastructure

Characteristics list

Rated voltage (V)	Capacitance (μF)	ΦD (mm)	Case size ΦD×L (mm)
400	100	Φ22	22×25
400	120	Φ22	22×30
400	120	Φ25	25×25
400	150	Φ22	22×35
400	150	Φ25	25×30
400	180	Φ22	22×40
400	180	Φ25	25×35
400	220	Φ22	22×45
400	220	Φ25	25×40
400	220	Φ30	30×25
400	270	Φ22	22×50
400	270	Φ25	25×45
400	270	Φ30	30×30
400	270	Φ35	35×25
400	330	Φ25	25×50
400	330	Φ30	30×35
400	330	Φ35	35×30
400	390	Φ30	30×40
400	390	Φ35	35×35
400	470	Φ30	30×45
400	470	Φ35	35×40
400	560	Φ30	30×50
400	560	Φ35	35×45
400	680	Φ35	35×50
450	82	Φ22	22×25
450	100	Φ22	22×30
450	120	Φ22	22×35
450	120	Φ25	25×25
450	150	Φ22	22×40
450	150	Φ25	25×30
450	180	Φ22	22×45
450	180	Φ25	25×35
450	180	Φ30	30×25
450	220	Φ22	22×50
450	220	Φ25	25×40
450	220	Φ30	30×30
450	270	Φ25	25×45
450	270	Φ30	30×35
450	270	Φ35	35×25
450	330	Φ25	25×50
450	330	Φ30	30×40
450	330	Φ35	35×30
450	390	Φ30	30×45
450	390	Φ35	35×35
450	470	Φ30	30×50
450	470	Φ35	35×40
450	560	Φ35	35×45
450	680	Φ35	35×50

The specifications cover 10 ~ 250 V (–40 ~ +105°C) and 350 ~ 500 V (–25 ~ +105°C), but ratings are listed only for 400 V and 450 V — subject to manufacturer confirmation.
Placement test: the original sheet does not define this test, and its condition line states that rated voltage is applied during the 1000 hours — subject to manufacturer confirmation.
Low-temperature characteristics: the last voltage group is printed as 250 ~ 350 V, which overlaps the 160 ~ 250 V group and does not cover the 400 V and 450 V ratings — subject to manufacturer confirmation.
The ratings table on the original sheet is titled to include rated ripple current, but no ripple current values are printed — subject to manufacturer confirmation.
The ordering example (47 μF, 63 V, case 8×12 mm) is not among the CD294 ratings — subject to manufacturer confirmation.