

SCREW TERMINAL TYPE ALUMINUM ELECTROLYTIC CAPACITORS

HCGHA Series

Useful of 4,000 hours at 105°C (Warranty of 2,000 hours at 105°C)

Features

- Warranty life of 2000 hours at 105°C through improvement of electrolyte liquid



Product Specifications

Items	Specifications
Temperature range	-40°C ~ +105°C
Capacitance tolerance	±20% (20°C, 120Hz)
Rated voltage	25 ~ 400V.DC
Leakage current	0.01CV (µA) or 5mA, whichever is smaller or less [C = nominal capacitance (µF), V = rated voltage (V)]
Dissipation factor	Less than the value specified in the standard products table. (20°C, 120Hz)
Permissible ripple current	As specified in the standard products table. (105°C, 120Hz)
High-temperature load	After the rated voltage with specified ripple current is applied at 105°C for 2000 hours: Capacitance tolerance: ±15% or less of the initial value Dissipation factor: 175% or less of the specified initial value Leakage current: Specified initial value or less
Others	JIS C 5101-4.

Ripple current correction coefficient

Temperature (°C)	40	55	70	85	105
Correction coefficient 250W under	4.9	3.9	3.0	1.8	1.0
Correction coefficient 400W	3.8	3.3	2.5	2.0	1.0
Frequency (Hz)	50/60	120	300	1K	10K
Correction coefficient	0.8	1.0	1.1	1.3	1.4

Ripple current should be under 60 Arms at M5 terminal in accordance with from the permissible current.

Attachment of legs

- See page 49 for shapes and dimensions.
- Product names in the Standard Units Rating Table correspond to the attachment legs for Type Y (Type I for ø36 only), but Type I attachment legs may be used (Shape Code = I).
- If attachment legs are not necessary, enter "N" for the attachment leg shape code.
- Attachment legs will be delivered separately.

標準品定格表

Rated Voltage V. DC	Capacitance (µF)	Case size øDXL(mm)	Case code	tanδ 20°C, 120Hz	Ripple current (Arms) 105°C, 120Hz	Product name
25V(1E)	10000	36·53	A5	0.35	2.9	HCGHA1E1031
	15000	36·83	A8	0.35	4.2	HCGHA1E1531
	22000	36·83	A8	0.35	5.1	HCGHA1E2231
	33000	36·100	A10	0.40	6.3	HCGHA1E3331
	47000	51·75	C8R	0.40	8.0	HCGHA1E473Y
	68000	51·115	C12R	0.50	10.0	HCGHA1E683Y
	100000	64·96	D10R	0.60	11.3	HCGHA1E104Y
	150000	64·115	D12R	0.80	12.9	HCGHA1E154Y
	220000	77·115	E12R	1.00	14.8	HCGHA1E224Y
330000	90·131	F13R	1.00	19.9	HCGHA1E334Y	

Rated Voltage V. DC	Capacitance (µF)	Case size øDXL(mm)	Case code	tanδ 20°C, 120Hz	Ripple current (Arms) 105°C, 120Hz	Product name
35V(1V)	6800	36·53	A5	0.30	2.6	HCGHA1V6821
	10000	36·83	A8	0.30	3.7	HCGHA1V1031
	15000	36·83	A8	0.30	4.5	HCGHA1V1531
	22000	36·100	A10	0.35	5.5	HCGHA1V2231
	33000	51·75	C8R	0.40	6.7	HCGHA1V333Y
	47000	51·96	C10R	0.45	8.1	HCGHA1V473Y
	68000	51·115	C12R	0.50	10.0	HCGHA1V683Y
	100000	64·115	D12R	0.60	12.1	HCGHA1V104Y
	150000	77·115	E12R	0.70	13.8	HCGHA1V154Y
	220000	90·131	F13R	0.70	17.6	HCGHA1V224Y

Rated Voltage V. DC	Capacitance (µF)	Case size øDXL(mm)	Case code	tanδ 20°C, 120Hz	Ripple current (Arms) 105°C, 120Hz	Product name
50V(1H)	3300	36·53	A5	0.20	2.2	HCGHA1H3321
	4700	36·53	A5	0.25	3.3	HCGHA1H4721
	6800	36·83	A8	0.25	3.4	HCGHA1H6821
	10000	36·83	A8	0.25	4.1	HCGHA1H1031
	15000	36·100	A10	0.30	4.9	HCGHA1H1531
	22000	51·75	C8R	0.35	5.9	HCGHA1H223Y
	33000	51·115	C12R	0.40	7.8	HCGHA1H333Y
	47000	64·96	D10R	0.40	9.5	HCGHA1H473Y
	68000	64·115	D12R	0.45	11.6	HCGHA1H683Y
	100000	77·115	E12R	0.50	14.1	HCGHA1H104Y
150000	90·131	F13R	0.50	18.9	HCGHA1H154Y	

Rated Voltage V. DC	Capacitance (µF)	Case size øDXL(mm)	Case code	tanδ 20°C, 120Hz	Ripple current (Arms) 105°C, 120Hz	Product name
63V(1J)	2200	36·53	A5	0.15	2.1	HCGHA1J2221
	3300	36·53	A5	0.20	2.2	HCGHA1J3321
	4700	36·83	A8	0.20	3.1	HCGHA1J4721
	6800	36·83	A8	0.20	3.7	HCGHA1J6821
	10000	36·100	A10	0.25	4.4	HCGHA1J1031
	15000	51·75	C8R	0.25	5.7	HCGHA1J153Y
	22000	51·96	C10R	0.30	6.8	HCGHA1J223Y
	33000	64·96	D10R	0.30	9.2	HCGHA1J333Y
	47000	64·115	D12R	0.35	10.9	HCGHA1J473Y
	68000	77·115	E12R	0.40	13.0	HCGHA1J683Y
	100000	90·131	F13R	0.40	17.2	HCGHA1J104Y

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Rated Voltage V. DC	Capacitance (μ F)	Case size ϕ DXL(mm)	Case code	$\tan\delta$ 20°C,120Hz	Ripple current (Arms) 105°C,120Hz	Product name
80V(1K)	2200	36·53	A5	0.15	2.1	HCGHA1K222L
	3300	36·83	A8	0.15	3.0	HCGHA1K332L
	4700	36·83	A8	0.15	3.6	HCGHA1K472L
	6800	36·100	A10	0.20	4.0	HCGHA1K682L
	10000	51·75	C8R	0.20	5.2	HCGHA1K103Y
	15000	51·96	C10R	0.25	6.2	HCGHA1K153Y
	22000	64·96	D10R	0.25	8.2	HCGHA1K223Y
	33000	77·96	E10R	0.30	9.7	HCGHA1K333Y
	47000	77·115	E12R	0.30	12.5	HCGHA1K473Y
68000	90·131	F13R	0.30	16.4	HCGHA1K683Y	

Rated Voltage V. DC	Capacitance (μ F)	Case size ϕ DXL(mm)	Case code	$\tan\delta$ 20°C,120Hz	Ripple current (Arms) 105°C,120Hz	Product name
100V(2A)	1000	36·53	A5	0.15	1.4	HCGHA2A102L
	1500	36·53	A5	0.15	1.7	HCGHA2A152L
	2200	36·83	A8	0.15	2.5	HCGHA2A222L
	3300	36·83	A8	0.15	3.0	HCGHA2A332L
	4700	36·100	A10	0.15	3.9	HCGHA2A472L
	6800	51·75	C8R	0.15	5.0	HCGHA2A682Y
	10000	51·96	C10R	0.15	6.5	HCGHA2A103Y
	15000	64·96	D10R	0.20	7.6	HCGHA2A153Y
	22000	77·96	E10R	0.20	9.7	HCGHA2A223Y
	33000	77·130	E13R	0.25	11.8	HCGHA2A333Y
	47000	90·131	F13R	0.25	15.0	HCGHA2A473Y

Rated Voltage V. DC	Capacitance (μ F)	Case size ϕ DXL(mm)	Case code	$\tan\delta$ 20°C,120Hz	Ripple current (Arms) 105°C,120Hz	Product name
160V(2C)	470	36·53	A5	0.15	1.0	HCGHA2C471L
	680	36·53	A5	0.15	1.1	HCGHA2C681L
	1000	36·83	A8	0.15	1.7	HCGHA2C102L
	1500	36·83	A8	0.15	2.0	HCGHA2C152L
	2200	36·100	A10	0.15	2.7	HCGHA2C222L
	3300	51·75	C8R	0.15	3.5	HCGHA2C332Y
	4700	51·96	C10R	0.15	4.4	HCGHA2C472Y
	6800	64·96	D10R	0.15	5.9	HCGHA2C682Y
	10000	77·96	E10R	0.15	7.6	HCGHA2C103Y
	15000	77·130	E13R	0.15	10.3	HCGHA2C153Y
	22000	90·131	F13R	0.15	13.2	HCGHA2C223Y

Rated Voltage V. DC	Capacitance (μ F)	Case size ϕ DXL(mm)	Case code	$\tan\delta$ 20°C,120Hz	Ripple current (Arms) 105°C,120Hz	Product name
200V(2D)	330	36·53	A5	0.15	0.8	HCGHA2D331L
	470	36·53	A5	0.15	1.0	HCGHA2D471L
	680	36·53	A5	0.15	1.1	HCGHA2D681L
	1000	36·83	A8	0.15	1.7	HCGHA2D102L
	1500	36·100	A10	0.15	2.2	HCGHA2D152L
	2200	51·75	C8R	0.15	2.8	HCGHA2D222Y
	3300	51·96	C10R	0.15	3.7	HCGHA2D332Y
	4700	64·96	D10R	0.15	4.9	HCGHA2D472Y
	6800	64·115	D12R	0.15	6.3	HCGHA2D682Y
	10000	77·115	E12R	0.15	8.1	HCGHA2D103Y
	15000	90·131	F13R	0.15	10.9	HCGHA2D153Y

Rated Voltage V. DC	Capacitance (μ F)	Case size ϕ DXL(mm)	Case code	$\tan\delta$ 20°C,120Hz	Ripple current (Arms) 105°C,120Hz	Product name
250V(2E)	330	36·53	A5	0.15	0.8	HCGHA2E331L
	470	36·53	A5	0.15	1.0	HCGHA2E471L
	680	36·83	A8	0.15	1.4	HCGHA2E681L
	1000	36·100	A10	0.15	1.9	HCGHA2E102L
	1500	51·75	C8R	0.15	2.3	HCGHA2E152Y
	2200	51·96	C10R	0.15	3.1	HCGHA2E222Y
	3300	64·96	D10R	0.15	4.2	HCGHA2E332Y
	4700	64·115	D12R	0.15	5.4	HCGHA2E472Y
	6800	77·115	E12R	0.15	6.9	HCGHA2E682Y
	10000	77·155	E16R	0.15	9.3	HCGHA2E103Y
	15000	90·157	F16R	0.15	12.2	HCGHA2E153Y

Rated Voltage V. DC	Capacitance (μ F)	Case size ϕ DXL(mm)	Case code	$\tan\delta$ 20°C,120Hz	Ripple current (Arms) 105°C,120Hz	Product name
400V(2G)	1000	51·75	C8R	0.15	2.5	HCGHA2G102Y
	1200	51·96	C10R	0.15	3.0	HCGHA2G122Y
	1500	51·115	C12R	0.15	3.6	HCGHA2G152Y
	1800	51·130	C13R	0.15	4.1	HCGHA2G182Y
	2200	64·96	D10R	0.15	4.5	HCGHA2G222Y
	2700	64·115	D12R	0.15	5.3	HCGHA2G272Y
	3300	64·130	D13R	0.15	6.2	HCGHA2G332Y
	3900	64·155	D16R	0.15	7.2	HCGHA2G392YD
		77·115	E12R	0.15	6.8	HCGHA2G392YE
	4700	64·195	D20R	0.15	8.7	HCGHA2G472YD
		77·130	E13R	0.15	7.8	HCGHA2G472YE
	5600	64·195	D20R	0.15	9.6	HCGHA2G562YD
		77·155	E16R	0.15	9.2	HCGHA2G562YE
	6800	90·157	F16R	0.15	10.7	HCGHA2G682Y
	8200	90·157	F16R	0.15	11.8	HCGHA2G822Y
	10000	90·196	F20R	0.15	14.1	HCGHA2G103Y

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