

HU Series

Useful of 2,000 hours at 105°C

- Conform RoHS

Features

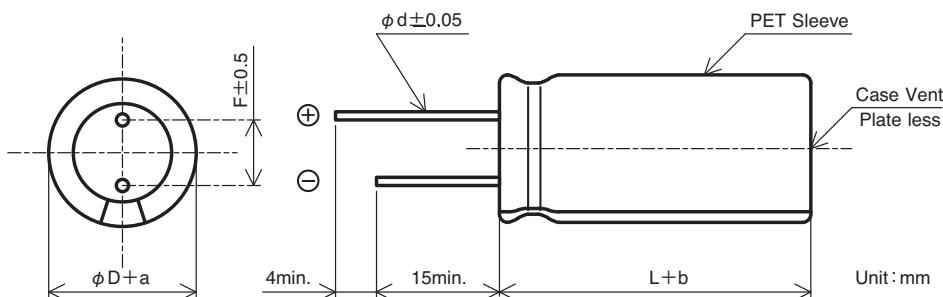
- The HU type is the radial type products of 2,000 hours.

HU →
Long-life

HL
P.164

**Product Specifications**

Items	Specifications
Temperature range	-25°C ~ +105°C
Rated voltage	200 ~ 450V.DC
Capacitance tolerance	±20% (20°C, 120Hz)
Leakage current	Not more than $0.04CV + 100 (\mu A)$ (20°C, after 2 minutes) [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 product table. (105°C, 120Hz)
Endurance	After the rated voltage with specified ripple current is applied at 105°C for 2,000 hours : Capacitance change : Within ±20% of the initial value measured. Dissipation factor : 200% or less than the initial value specified. Leakage current : Less than or equal to the initial value specified.
Shelf life	The following specification shall be meet when the capacitor are restored to 20°C after storage of 1,000 hours at 105°C with no voltage applied. Before the measurement, the capacitor shall be preconditioned by applying the voltage treatment according to Item 4.1 of JIS C 5101-4. Capacitance change : Within ±20% of the initial value measured. Dissipation factor : 200% or less than the initial value specified. Leakage current : 200% or less than the initial value specified.
Others	JIS C 5101-4

Dimensions

ϕD	ϕd	F	a	b
10	0.6	5.0	0.5MAX	2.0MAX
12.5	0.6	5.0	0.5MAX	2.0MAX
16	0.8	7.5	0.5MAX	2.0MAX
18	0.8	7.5	0.5MAX	2.0MAX

Ripple current correction coefficient

Frequency (Hz)	50/60	120	1K	10K	$\geq 100K$
Correction coefficient	0.80	1.00	1.55	1.85	2.00

Product code

(Example) HU series 450V 68μF ±20%	
HU	Environmental code
2W	Case height code
680	Case dia code
M	Terminal code
L	Capacitance tolerance code
V	Capacitance code
25	Rated voltage code
EC	
Type of series	

Refer to page 167 for other terminal shape available on request.

RADIAL TYPE ALUMINUM ELECTROLYTIC CAPACITORS

HU Series

Standard Products Table

Rated Voltage (V.DC)	Capacitance (μ F)	Case size ϕ D × L(mm)	$\tan \delta$ 20°C, 120Hz	Ripple current (Arms) 105°C, 120Hz	Product name
200	100	12.5 × 25	0.20	0.62	HU2D101MLS25EC
	220	16 × 31.5	0.20	1.05	HU2D221MLU315EC
	330	16 × 40	0.20	1.43	HU2D331MLU40EC
		18 × 31.5	0.20	1.43	HU2D331MLV315EC
	470	16 × 50	0.20	1.75	HU2D471MLU50EC
		18 × 40	0.20	1.75	HU2D471MLV40EC
	560	18 × 50	0.20	1.93	HU2D561MLV50EC
220	100	16 × 20	0.20	0.63	HU220V101MLU20EC
	220	16 × 31.5	0.20	1.10	HU220V221MLU315EC
	330	16 × 45	0.20	1.45	HU220V331MLU45EC
		18 × 35.5	0.20	1.45	HU220V331MLV355EC
	470	18 × 45	0.20	1.78	HU220V471MLV45EC
250	100	16 × 25	0.20	0.66	HU2E101MLU25EC
	220	16 × 35.5	0.20	1.15	HU2E221MLU355EC
		18 × 31.5	0.20	1.15	HU2E221MLV315EC
	330	16 × 50	0.20	1.48	HU2E331MLU50EC
		18 × 40	0.20	1.48	HU2E331MLV40EC
	470	18 × 50	0.20	1.83	HU2E471MLV50EC
350	33	12.5 × 20	0.24	0.33	HU2V330MLS20EC
	47	12.5 × 25	0.24	0.41	HU2V470MLS25EC
	100	16 × 31.5	0.24	0.77	HU2V101MLU315EC
		18 × 25	0.24	0.77	HU2V101MLV25EC
	220	16 × 50	0.24	1.22	HU2V221MLU50EC
		18 × 40	0.24	1.22	HU2V221MLV40EC
400	10	10 × 16	0.24	0.12	HU2G100MLR16EC
	15	10 × 20	0.24	0.15	HU2G150MLR20EC
	27	12.5 × 20	0.24	0.26	HU2G270MLS20EC
	33	12.5 × 25	0.24	0.30	HU2G330MLS25EC
	47	16 × 20	0.24	0.45	HU2G470MLU20EC
	56	16 × 25	0.24	0.50	HU2G560MLU25EC
		18 × 20	0.24	0.50	HU2G560MLV20EC
	68	16 × 25	0.24	0.59	HU2G680MLU25EC
	82	16 × 31.5	0.24	0.67	HU2G820MLU315EC
		18 × 25	0.24	0.67	HU2G820MLV25EC
	100	16 × 35.5	0.24	0.78	HU2G101MLU355EC
		18 × 31.5	0.24	0.78	HU2G101MLV315EC
	120	16 × 40	0.24	0.85	HU2G121MLU40EC
		18 × 31.5	0.24	0.85	HU2G121MLV315EC
	150	16 × 45	0.24	0.98	HU2G151MLU45EC
		18 × 35.5	0.24	0.98	HU2G151MLV355EC
	180	16 × 50	0.24	1.08	HU2G181MLU50EC
		18 × 40	0.24	1.08	HU2G181MLV40EC
	220	18 × 50	0.24	1.22	HU2G221MLV50EC

RADIAL TYPE ALUMINUM ELECTROLYTIC CAPACITORS

Standard Products Table

Rated Voltage (V.DC)	Capacitance (μ F)	Case size ϕ D × L(mm)	$\tan \delta$ 20°C, 120Hz	Ripple current (Arms) 105°C, 120Hz	Product name
420	10	10×16	0.24	0.13	HU420V100MLR16EC
	15	10×20	0.24	0.18	HU420V150MLR20EC
	22	12.5×20	0.24	0.27	HU420V220MLS20EC
	27	12.5×25	0.24	0.30	HU420V270MLS25EC
	33	12.5×25	0.24	0.37	HU420V330MLS25EC
	39	16×20	0.24	0.40	HU420V390MLU20EC
	47	16×20	0.24	0.47	HU420V470MLU20EC
	56	16×25	0.24	0.65	HU420V560MLU25EC
		18×20	0.24	0.65	HU420V560MLV20EC
	68	16×25	0.24	0.72	HU420V680MLU25EC
	82	16×31.5	0.24	0.72	HU420V820MLU315EC
		18×25	0.24	0.72	HU420V820MLV25EC
	100	16×35.5	0.24	0.83	HU420V101MLU355EC
		18×31.5	0.24	0.83	HU420V101MLV315EC
	120	16×40	0.24	0.93	HU420V121MLU40EC
		18×35.5	0.24	0.93	HU420V121MLV355EC
	150	16×45	0.24	1.05	HU420V151MLU45EC
		18×40	0.24	1.05	HU420V151MLV40EC
	180	18×45	0.24	1.15	HU420V181MLV45EC
450	8.2	10×16	0.24	0.12	HU2W8R2MLR16EC
	10	10×20	0.24	0.13	HU2W100MLR20EC
	22	12.5×20	0.24	0.25	HU2W220MLS20EC
	27	12.5×25	0.24	0.29	HU2W270MLS25EC
	33	12.5×25	0.24	0.39	HU2W330MLS25EC
	47	18×20	0.24	0.51	HU2W470MLV20EC
	56	16×25	0.24	0.57	HU2W560MLU25EC
		18×20	0.24	0.57	HU2W560MLV20EC
	68	18×25	0.24	0.67	HU2W680MLV25EC
	82	16×31.5	0.24	0.75	HU2W820MLU315EC
	100	16×35.5	0.24	0.84	HU2W101MLU355EC
		18×31.5	0.24	0.84	HU2W101MLV315EC
	120	16×45	0.24	0.94	HU2W121MLU45EC
	150	16×50	0.24	1.05	HU2W151MLU50EC
		18×40	0.24	1.05	HU2W151MLV40EC
	180	18×45	0.24	1.10	HU2W181MLV45EC