

# SNAP MOUNT TYPE ALUMINUM ELECTROLYTIC CAPACITORS

New

DH Series

Useful of 5,000 hours at 105°C (Warranty of 3,000 hours at 105°C)

• Conform RoHS

## Features

- Suited to high frequency Charge-Discharge use for AC servomotor, general inverter.



## Product Specifications

Items	Specifications
Temperature range	-25°C ~ +105°C
Rated voltage	400,450V.DC
Capacitance tolerance	±20% (20°C, 120Hz)
Leakage current	0.02CV (µA) or 3mA, whichever is smaller or less(20°C, after 5minutes) [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 temp. Load life test	After 105°C, 3000h, rated voltage with specified ripple current application Capacitance variation : Initial value ±20% Dissipation factor : 200% or less of specified initial value Leakage current : Not greater than the specified initial value
Endurance of charge-discharge behavior	After an application of charge-discharge voltage for 50 million times (charge-discharge (ΔV)=150V, cycle 6Hz) at 40°C, following requirements must be met. Capacitance variation : Initial value ±20% Dissipation factor : 200% or less of specified initial value Leakage current : Not greater than the specified initial value
Reference	When it is used ripple current load together with charge-discharge, please ask us it, because the confirmation of temperature rise (An increase in core temperature by internal heating due to ripple current temperature) is necessary . If it is not used together, we recommend measuring the core temperature of the capacitor with a thermocouple. (We can manufacture samples with inserted thermocouples according to customer requests.)
Others	JIS C 5101-4.

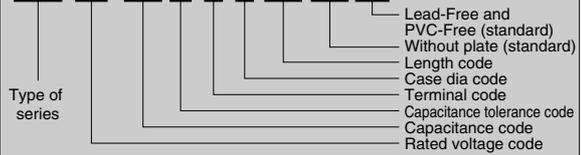
## Ripple current correction coefficient

Temperature (°C)	60	70	85	105	
Correction coefficient	1.9	1.7	1.4	1.0	
Frequency (Hz)	50/60	120	300	1k	≥10K
Correction coefficient	0.7	1.0	1.1	1.3	1.4

A continuous load should be avoided over 10 A at the terminal in accordance with the permissible current.

Product code : (Example) DH Series 400V 100µF ±20%

**DH 2G 101 M C X S2 WPEC**



## Standard Products Table

Rated Voltage Code (V. DC)	Capacitance (µF)	Case size øDXL (mm)	tanδ 20°C, 120Hz	Ripple current (Arms) 105°C, 120Hz	ESR(typ.) 20°C, 100Hz (mΩ)	Product name
400V (2G)	100	22×25	0.20	0.70	1100	DH2G101MCXS2WPEC
	120	22×30	0.20	0.82	920	DH2G121MCXS3WPEC
		25×25	0.20	0.81	920	DH2G121MCYS2WPEC
	150	22×35	0.20	0.96	730	DH2G151MCXS4WPEC
		180	22×40	0.20	1.09	610
	25×30		0.20	1.04	610	DH2G181MCYS3WPEC
	220	22×45	0.20	1.25	500	DH2G221MCXS6WPEC
		25×35	0.20	1.21	500	DH2G221MCYS4WPEC
			30×25	0.20	1.15	500
	270	22×50	0.20	1.44	410	DH2G271MCXS7WPEC
		25×40	0.20	1.39	410	DH2G271MCYS5WPEC
		30×30	0.20	1.34	410	DH2G271MCZS3WPEC
			35×25	0.20	1.32	410
	330	25×45	0.20	1.60	330	DH2G331MCYS6WPEC
		30×35	0.20	1.55	330	DH2G331MCZS4WPEC
	390	30×40	0.20	1.76	280	DH2G391MCZS5WPEC
		35×30	0.20	1.67	280	DH2G391MCAS3WPEC
	470	30×45	0.20	2.00	230	DH2G471MCZS6WPEC
		35×35	0.20	1.91	230	DH2G471MCAS4WPEC
	560	30×50	0.20	2.25	200	DH2G561MCZS7WPEC
35×40		0.20	2.17	200	DH2G561MCAS5WPEC	
680	35×45	0.20	2.47	160	DH2G681MCAS6WPEC	

Refer to page (97) for other terminal shape available on request

Rated Voltage Code (V. DC)	Capacitance (µF)	Case size øDXL (mm)	tanδ 20°C, 120Hz	Ripple current (Arms) 105°C, 120Hz	ESR(typ.) 20°C, 100Hz (mΩ)	Product name
450V (2W)	82	22×25	0.20	0.64	1220	DH2W820MCXS2WPEC
	100	22×30	0.20	0.75	1000	DH2W101MCXS3WPEC
		25×25	0.20	0.74	1000	DH2W101MCYS2WPEC
	120	22×35	0.20	0.86	830	DH2W121MCXS4WPEC
		25×30	0.20	0.85	830	DH2W121MCYS3WPEC
	150		22×40	0.20	1.00	660
		25×35	0.20	1.00	660	DH2W151MCYS4WPEC
			30×25	0.20	0.95	660
	180	22×45	0.20	1.13	550	DH2W181MCXS6WPEC
		25×35	0.20	1.09	550	DH2W181MCYS4WPEC
			25×45	0.20	1.30	450
	220	30×30	0.20	1.21	450	DH2W221MCZS3WPEC
		35×25	0.20	1.19	450	DH2W221MCAS2WPEC
			25×50	0.20	1.49	370
		270	30×35	0.20	1.41	370
	35×30		0.20	1.39	370	DH2W271MCAS3WPEC
	330	30×40	0.20	1.62	300	DH2W331MCZS5WPEC
		35×35	0.20	1.60	300	DH2W331MCAS4WPEC
			30×50	0.20	1.88	260
	390	35×40	0.20	1.81	260	DH2W391MCAS5WPEC
470		35×45	0.20	2.05	210	DH2W471MCAS6WPEC
560	35×50	0.20	2.31	180	DH2W561MCAS7WPEC	

## Life time graph

Useful life depending on ambient temperature  $T_a$  and ripple current operating conditions  $I_r$  versus rated ripple current at  $105^\circ\text{C}$ , 120Hz

