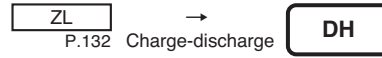


## DH Series Useful of 5,000 hours at 105°C

- Conform RoHS

### Features

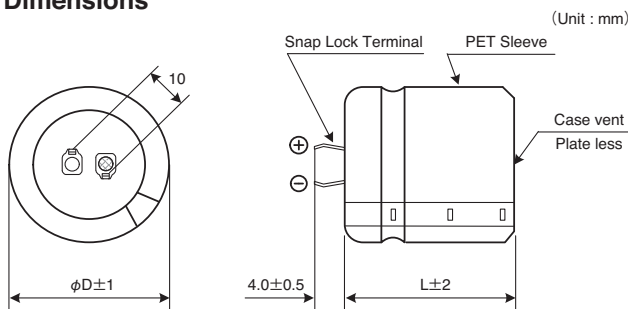
- Suited to high frequency Charge-Discharge use for AC servomotor, general inverter.



### 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 5 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 3,000 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 500 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 ±15% of the initial value measured Dissipation factor : 175% or less than the initial value specified Leakage current : Less than or equal to the initial value specified
Endurance of charge-discharge behavior	After an application of charge-discharge voltage for 200 million times (charge-discharge (ΔV) = 150V, cycle 6Hz) at 40°C, following requirements must be met. 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
Others	JIS C 5101-4

### Dimensions

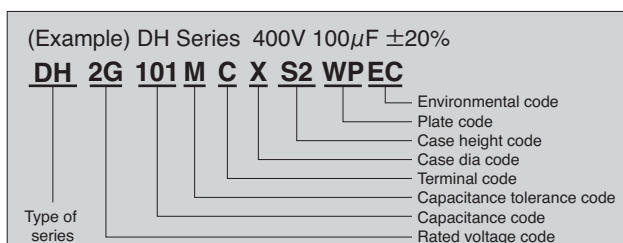


### Ripple current correction coefficient

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

Terminal permissible current is limited to 10Arms. (Even if calculated the permissible ripple current with the correction coefficient exceeds 10Arms)  
Please consult us when the ripple voltage exceeds 70Vp-p.

### Product code



Refer to page 118-119 for other terminal shape available on request.

Standard Products Table

Rated Voltage (V. DC)	Capacitance (μF)	Case size φ D × L (mm)	tanδ 20°C, 120Hz	Ripple current (Arms) 105°C, 120Hz	ESR(typ.) (mΩ) 20°C, 100Hz	Product name
400	100	22 × 25	0.20	0.70	1,100	DH2G101MCXS2WPEC
		22 × 30	0.20	0.82	920	DH2G121MCXS3WPEC
	120	25 × 25	0.20	0.81	920	DH2G121MCYS2WPEC
		22 × 35	0.20	0.96	730	DH2G151MCXS4WPEC
	150	22 × 40	0.20	1.09	610	DH2G181MCXS5WPEC
		25 × 30	0.20	1.04	610	DH2G181MCYS3WPEC
	180	22 × 45	0.20	1.25	500	DH2G221MCXS6WPEC
		25 × 35	0.20	1.21	500	DH2G221MCYS4WPEC
	220	30 × 25	0.20	1.15	500	DH2G221MCZS2WPEC
		22 × 50	0.20	1.44	410	DH2G271MCXS7WPEC
	270	25 × 40	0.20	1.39	410	DH2G271MCYS5WPEC
		30 × 30	0.20	1.34	410	DH2G271MCZS3WPEC
		35 × 25	0.20	1.32	410	DH2G271MCAS2WPEC
	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	

Rated Voltage (V. DC)	Capacitance (μF)	Case size φ D × L (mm)	tanδ 20°C, 120Hz	Ripple current (Arms) 105°C, 120Hz	ESR(typ.) (mΩ) 20°C, 100Hz	Product name
450	82	22 × 25	0.20	0.64	1,220	DH2W820MCXS2WPEC
	100	22 × 30	0.20	0.75	1,000	DH2W101MCXS3WPEC
		25 × 25	0.20	0.74	1,000	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	DH2W151MCXS5WPEC
		25 × 35	0.20	1.00	660	DH2W151MCYS4WPEC
		30 × 25	0.20	0.95	660	DH2W151MCZS2WPEC
	180	22 × 45	0.20	1.13	550	DH2W181MCXS6WPEC
		25 × 35	0.20	1.09	550	DH2W181MCYS4WPEC
	220	25 × 45	0.20	1.30	450	DH2W221MCYS6WPEC
		30 × 30	0.20	1.21	450	DH2W221MCZS3WPEC
		35 × 25	0.20	1.19	450	DH2W221MCAS2WPEC
	270	25 × 50	0.20	1.49	370	DH2W271MCYS7WPEC
		30 × 35	0.20	1.41	370	DH2W271MCZS4WPEC
		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
	390	30 × 50	0.20	1.88	260	DH2W391MCZS7WPEC
		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  $I$  versus rated ripple current at 105°C, 120Hz

