

# ALUMINUM ELECTROLYTIC CAPACITORS



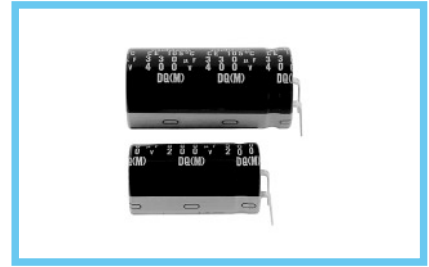
**DQ** series 105°C Horizontal Mounting Type



Smaller



DM

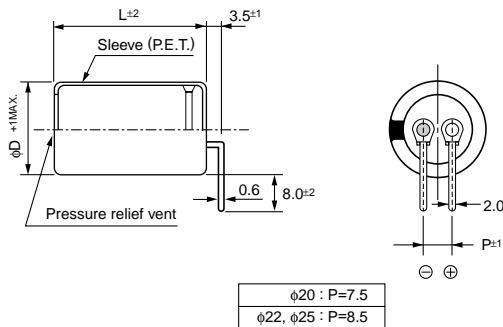


- Horizontal mounting version for  $\phi 20$ ,  $\phi 22$  and  $\phi 25$ .
- Suited for use in flat electronic devices where height space is limited.
- Adapted to the RoHS directive (2002/95/EC).

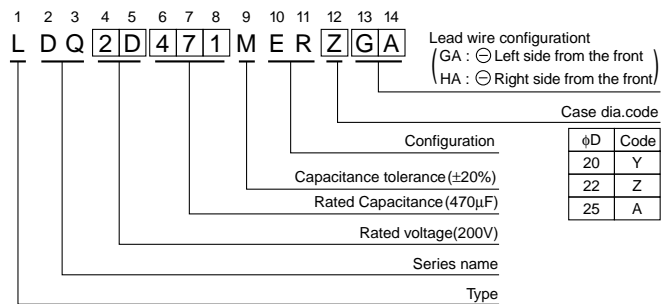
## Specifications

Item	Performance Characteristics		
Category Temperature Range	- 40 to +105°C (200V), - 25 to +105°C (400V)		
Rated Voltage Range	200 · 400V		
Rated Capacitance Range	68 to 1200 $\mu$ F		
Capacitance Tolerance	$\pm 20\%$ at 120Hz, 20°C		
Leakage Current	$I \leq 3 \cdot \sqrt{CV}$ ( $\mu$ A) (After 5 minutes' application of rated voltage) [C : Rated Capacitance ( $\mu$ F) V : Voltage (V)]		
tan $\delta$	Measurement frequency : 120Hz, Temperature : 20°C		
	Rated voltage (V)	200      400	
Stability at Low Temperature	Measurement frequency : 120Hz		
	Rated voltage (V)	200      400	
	Impedance ratio	Z - 25°C/Z+20°C      3      8	
Endurance	ZT/Z20(MAX.)	Z - 40°C/Z+20°C      12      —	
	After an application of DC voltage(in the range of rated DC voltage even after over-lapping the specified ripple current) for 2000 hours at 105°C, capacitors meet the characteristic requirements listed at right.	Capacitance change	Within $\pm 20\%$ of initial value
Shelf Life	After storing the capacitors under no load at 105°C for 1000 hours, and after performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they will meet the requirements listed at right.	tan $\delta$	200% or less of initial specified value
		Leakage current	Initial specified value or less
Marking	Printed with white color letter on black sleeve.	Capacitance change	Within $\pm 15\%$ of initial value
		tan $\delta$	150% or less of initial specified value
		Leakage current	Initial specified value or less

## Drawing



## Type numbering system (Example : 200V 470 $\mu$ F)



## Dimensions

Cap.( $\mu$ F)	V(Code)	Code	200V (2D)				400V (2G)				
			$\phi D$	20	22	25	20	22	25		
68	680					20×30	0.56				
82	820					20×30	0.64				
100	101					20×35	0.70				
120	121					20×40	0.75	22×35	0.75		
150	151					20×45	0.83	22×40	0.88		
180	181					20×50	0.95	22×45	0.95	25×35	0.95
220	221							22×50	1.10	25×40	1.10
270	271	20×30	1.10					22×60	1.22	25×45	1.22
330	331	20×35	1.20							25×50	1.44
390	391	20×40	1.31								
470	471	20×45	1.45	22×35	1.45						
560	561	20×50	1.58	22×40	1.60	25×35	1.60				
680	681			22×45	1.78	25×40	1.78				
820	821			22×60	2.04	25×45	2.04				
1000	102					25×50	2.30				
1200	122					25×60	2.65				
										Case size $\phi D \times L$ (mm)	Rated ripple

\* Other rating also available on request.

Rated Ripple (Arms) at 105°C, 120Hz

## Frequency coefficient of rated ripple current

Frequency (Hz)	50	60	120	300	1k	10k	50k or more
200V	0.81	0.85	1.00	1.17	1.32	1.45	1.50
400V	0.77	0.82	1.00	1.16	1.30	1.41	1.43

CAT.8100W

Minimum order quantity : 50pcs.