

# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

200 to 450V<sub>dc</sub>, Downsized, 105°C



Downsized ripple design (φ 10 to 18)  
 Voltage range : 200 to 450V<sub>dc</sub>, Capacitance range : 18 to 560μF  
 Ripple current : 2,000 hours at 105°C  
 Suitable for power supply applications  
 Instant type

**PAG**

↑  
 Downsized  
 Higher ripple  
 KMG

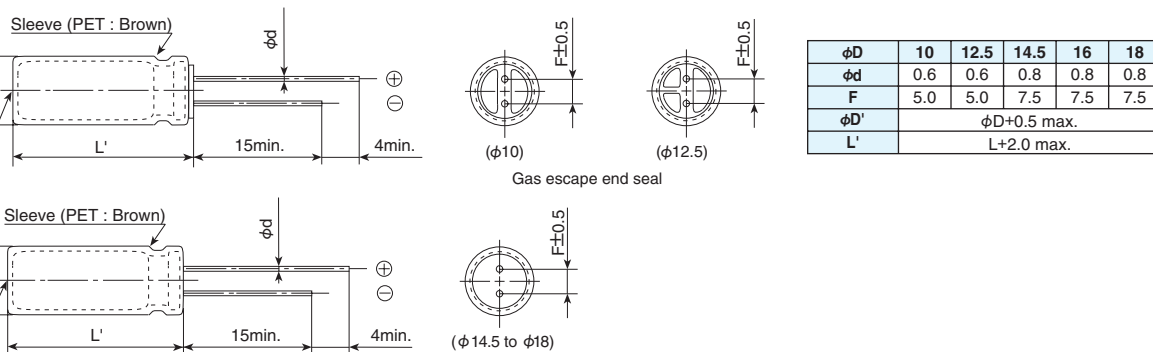


## CONDITIONS

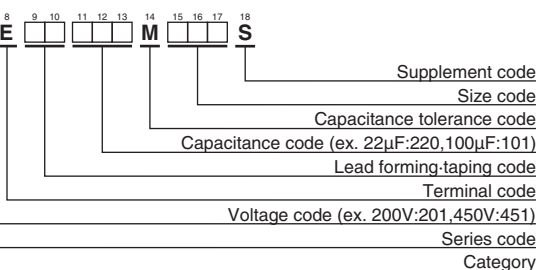
Characteristics					
Temperature range	-40 to +105°C (200, 400V <sub>dc</sub> ) -25 to +105°C (420, 450V <sub>dc</sub> )				
Voltage range	200 to 450V <sub>dc</sub>				
Capacitance tolerance	±20% (M) (at 20°C, 120Hz)°C				
Leakage current		After 1 minute	After 5 minutes		
	CV ≤ 1,000	I = 0.1CV + 40	I = 0.03CV + 15		
	CV > 1,000	I = 0.04CV + 100	I = 0.02CV + 25		
Where, I : Max. leakage current(μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C)°C					
Rated voltage (V <sub>dc</sub> )	200V	400V	420V	450V	
	tan δ (Max.) 0.12 0.15 0.20 0.20 (at 20°C, 120Hz)°C				
D.F. (tan δ)	Rated voltage (V <sub>dc</sub> )	200V	400V	420V	450V
	Z(-25°C)/Z(+20°C)	3	5	6	6
	Z(-40°C)/Z(+20°C)	6	6	—	—
(at 120Hz)					
The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 2,000 hours at 105°C.					
Capacitance change	≤ ±20% of the initial value				
D.F. (tan δ)	≤ 200% of the initial specified value				
Leakage current	≤ The initial specified value				
The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 105°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4.					
Capacitance change	≤ ±20% of the initial value				
D.F. (tan δ)	≤ 200% of the initial specified value				
Leakage current	≤ 500% of the initial specified value				

## Dimensions [mm]

Case : E



## MARKING SYSTEM



# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

200 to 450V<sub>dc</sub>, Downsized, 105°C

Series

## DC RATINGS

Case size φD×L(mm)	tan δ	Rated ripple current (mA <sub>rms</sub> /105°C, 120Hz)	Part No.	WV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (mA <sub>rms</sub> /105°C, 120Hz)	Part No.	
10×30	0.12	440	EPAG201E□□820MJ30S	420	22	10×30	0.20	230	EPAG421E□□220MJ30S	
10×35	0.12	510	EPAG201E□□101MJ35S		27	10×35	0.20	270	EPAG421E□□270MJ35S	
10×40	0.12	590	EPAG201E□□121MJ40S		33	10×40	0.20	310	EPAG421E□□330MJ40S	
12.5×30	0.12	650	EPAG201E□□151MK30S		39	12.5×30	0.20	330	EPAG421E□□390MK30S	
12.5×35	0.12	750	EPAG201E□□181MK35S		47	12.5×35	0.20	390	EPAG421E□□470MK35S	
12.5×40	0.12	830	EPAG201E□□221MK40S		56	12.5×40	0.20	430	EPAG421E□□560MK40S	
14.5×30	0.12	830	EPAG201E□□221MU30S		56	14.5×30	0.20	430	EPAG421E□□560MU30S	
14.5×35	0.12	960	EPAG201E□□271MU35S		68	14.5×35	0.20	510	EPAG421E□□680MU35S	
16×30	0.12	960	EPAG201E□□271ML30S		68	16×30	0.20	510	EPAG421E□□680ML30S	
16×35	0.12	1,100	EPAG201E□□331ML35S		82	14.5×40	0.20	570	EPAG421E□□820MU40S	
18×30	0.12	1,100	EPAG201E□□331MM30S		82	16×35	0.20	570	EPAG421E□□820ML35S	
16×40	0.12	1,240	EPAG201E□□391ML40S		100	16×40	0.20	610	EPAG421E□□101ML40S	
18×35	0.12	1,240	EPAG201E□□391MM35S		100	18×30	0.20	610	EPAG421E□□101MM30S	
18×40	0.12	1,390	EPAG201E□□471MM40S		120	18×35	0.20	690	EPAG421E□□121MM35S	
18×45	0.12	1,560	EPAG201E□□561MM45S		150	18×40	0.20	790	EPAG421E□□151MM40S	
10×30	0.15	260	EPAG401E□□270MJ30S		450	18	10×30	0.20	210	EPAG451E□□180MJ30S
10×35	0.15	300	EPAG401E□□330MJ35S			22	10×35	0.20	240	EPAG451E□□220MJ35S
10×40	0.15	340	EPAG401E□□390MJ40S			27	10×40	0.20	280	EPAG451E□□270MJ40S
12.5×30	0.15	370	EPAG401E□□470MK30S	33		12.5×30	0.20	310	EPAG451E□□330MK30S	
12.5×35	0.15	420	EPAG401E□□560MK35S	39		12.5×35	0.20	350	EPAG451E□□390MK35S	
12.5×40	0.15	480	EPAG401E□□680MK40S	47		12.5×40	0.20	390	EPAG451E□□470MK40S	
14.5×30	0.15	480	EPAG401E□□680MU30S	47		14.5×30	0.20	390	EPAG451E□□470MU30S	
14.5×35	0.15	530	EPAG401E□□820MU35S	56		14.5×35	0.20	440	EPAG451E□□560MU35S	
16×40	0.15	580	EPAG401E□□101MU40S	56		16×30	0.20	440	EPAG451E□□560ML30S	
16×30	0.15	580	EPAG401E□□101ML30S	68		14.5×40	0.20	500	EPAG451E□□680MU40S	
16×35	0.15	670	EPAG401E□□121ML35S	68		16×35	0.20	500	EPAG451E□□680ML35S	
18×30	0.15	670	EPAG401E□□121MM30S	82		16×40	0.20	550	EPAG451E□□820ML40S	
16×40	0.15	770	EPAG401E□□151ML40S	82		18×30	0.20	550	EPAG451E□□820MM30S	
18×35	0.15	770	EPAG401E□□151MM35S	100		18×35	0.20	650	EPAG451E□□101MM35S	
18×40	0.15	880	EPAG401E□□181MM40S	120		18×40	0.20	740	EPAG451E□□121MM40S	
18×45	0.15	1,000	EPAG401E□□221MM45S	150		18×45	0.20	810	EPAG451E□□151MM45S	

appropriate lead forming or taping code.

## RIPPLE CURRENT MULTIPLIERS

pliers

120	1k	10k	100k
1.00	1.50	1.75	1.80
1.00	1.30	1.40	1.50

capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. If performance is required in actual use, the rms ripple current has to be reduced.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for* [Aluminium Electrolytic Capacitors - Radial Leaded](#) *category:*

*Click to view products by* [Nippon Chemi-Con](#) *manufacturer:*

Other Similar products are found below :

[NRELS102M35V16X16C.140LLF](#) [ESRG160ETC100MD07D](#) [227RZS050M](#) [335CKR250M](#) [476CKH100MSA](#) [477CKR100M](#)  
[107CKR010M](#) [107CKH063MSA](#) [RJH-25V222MI9#](#) [RJH-35V221MG5#](#) [B43827A1106M8](#) [RJH-50V221MH6#](#) [EKYA500ELL470MF11D](#)  
[B41022A5686M6](#) [ESRG250ELL101MH09D](#) [EKMA160EC3101MF07D](#) [RJB-10V471MG3#](#) [ESMG160ETD221MF11D](#)  
[EKZH160ETD152MJ20S](#) [RJH-35V122MJ6#](#) [EGXF630ELL621ML20S](#) [RBD-25V100KE3#N](#) [EKMA350ELL100ME07D](#)  
[ESMG160ETD101ME11D](#) [ELXY100ETD102MJ20S](#) [EGXF500ELL561ML15S](#) [EKMG350ETD471MJ16S](#) [35YXA330MEFC10X12.5](#)  
[RXW471M1ESA-0815](#) [ELXZ630ELL221MJ25S](#) [ERR1HM1R0D11OT](#) [LPE681M30060FVA](#) [LPL471M22030FVA](#) [HFE221M25030FVA](#)  
[LKMD1401H221MF](#) [B41888G6108M000](#) [EKMA160ETD470MF07D](#) [UHW1J102MHD6](#) [EKMG500ETD221MJC5S](#) [LKMK2502W101MF](#)  
[LKMD1401H181MF](#) [LKMI2502G820MF](#) [LKMJ2001J122MF](#) [LKML2501C472MF](#) [LKMJ4002C681MF](#) [450MXH330MEFCSN25X45](#)  
[450MXK330MA2RFC22X50](#) [63ZLH560MEFCG412.5X30](#) [ELH2DM331O25KT](#) [ELH2DM471P30KT](#)