

# CONDUCTIVE POLYMER HYBRID ALUMINUM ELECTROLYTIC CAPACITORS



**New**  
**YM**

Chip type, High Capacitance & High Ripple Current Series



- High ripple current compared with YH series
- High temperature range, for 125°C use
- Complied to the RoHS directive

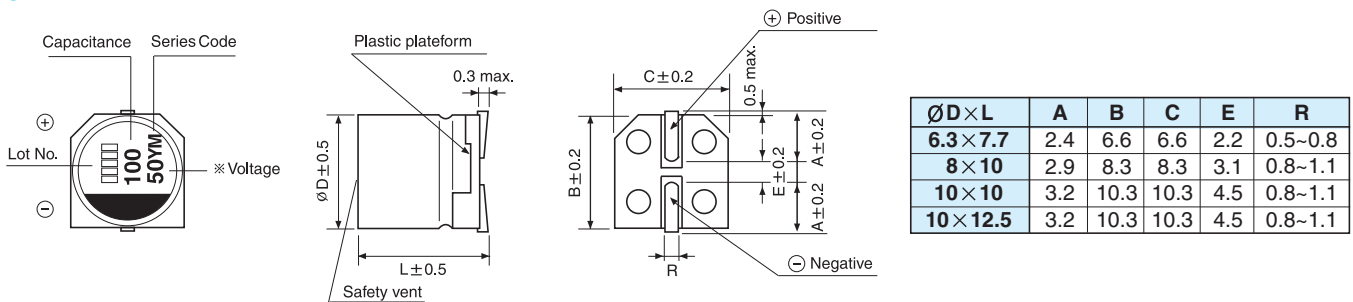
YH → **YM**  
High ripple

Item	Characteristics										
Operating temperature range	-55 ~ +125°C										
Leakage current max.	$I = 0.01CV$ or $3\mu A$ whichever is greater (after 2 minutes)										
Capacitance tolerance	$\pm 20\%$ at 120Hz, 20°C										
Dissipation factor max. (at 120Hz, 20°C)	<table border="1"> <tr> <td>WV</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> </tr> <tr> <td><math>\tan\delta</math></td> <td>0.14</td> <td>0.12</td> <td>0.1</td> <td>0.08</td> </tr> </table>	WV	25	35	50	63	$\tan\delta$	0.14	0.12	0.1	0.08
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$\tan\delta$	0.14	0.12	0.1	0.08							
Low temperature characteristics (Impedance ratio at 100kHz)	$Z(-25^\circ C) / Z(+20^\circ C) \leq 1.5$ $Z(-55^\circ C) / Z(+20^\circ C) \leq 2.0$										
Load life	<p>After an application of DC bias voltage plus the rated AC ripple current for 4000 hours at 125°C. The measurement shall meet the following limits. The DC voltage plus the peak AC voltage combined must not exceed the rated voltage.</p> <table border="1"> <tr> <td>Capacitance change</td> <td>Within <math>\pm 30\%</math> of initial value</td> </tr> <tr> <td><math>\tan\delta</math></td> <td>Less than 200% of the specified value</td> </tr> <tr> <td>ESR</td> <td>Less than 200% of the specified value</td> </tr> <tr> <td>Leakage current</td> <td>Less than specified value</td> </tr> </table>	Capacitance change	Within $\pm 30\%$ of initial value	$\tan\delta$	Less than 200% of the specified value	ESR	Less than 200% of the specified value	Leakage current	Less than specified value		
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ESR	Less than 200% of the specified value										
Leakage current	Less than specified value										
Shelf life (at 125°C)	After 1000 hours no load test, leakage current, capacitance and $\tan\delta$ are same as load life value. The measurement shall be performed at 20°C by the KS C IEC 60384 - 4										
Resistance to soldering heat	<p>The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them at 250°C for 10 seconds.</p> <table border="1"> <tr> <td>Leakage current</td> <td>Less than specified value</td> </tr> <tr> <td>Capacitance change</td> <td>Within <math>\pm 10\%</math> of initial value</td> </tr> <tr> <td><math>\tan\delta</math></td> <td>Less than specified value</td> </tr> </table>	Leakage current	Less than specified value	Capacitance change	Within $\pm 10\%$ of initial value	$\tan\delta$	Less than specified value				
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HYBRID TYPES

## ● DRAWING

Unit : mm



## ● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

$\mu F$	WV	25		35			50			63		
47							6.3×7.7	40	1500	8×10	40	1700
82										10×10	30	2000
100				6.3×7.7	35	1700	8×10	30	1700	10×12.5	22	3000
150	6.3×7.7	30	1800	8×10	27	2000	10×10	25	2000			
220							10×12.5	19	3200			
330	8×10	27	2000	10×10	20	2800						
390				10×12.5	17	3500						
560	10×10	20	2800									
680	10×12.5	16	3500									

↑ Ripple current (mA rms) at 125°C, 100kHz  
 ↑ ESR (mΩ) at 20°C, 100kHz  
 ↑ Case size  $\varnothing D \times L$ (mm)

## ● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

Frequency	120Hz	1kHz	10kHz	100kHz
Coefficient	0.05	0.30	0.70	1.00