

CONDUCTIVE POLYMER HYBRID ALUMINUM ELECTROLYTIC CAPACITORS

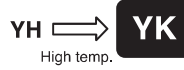
New



Chip type, High Temperature Series



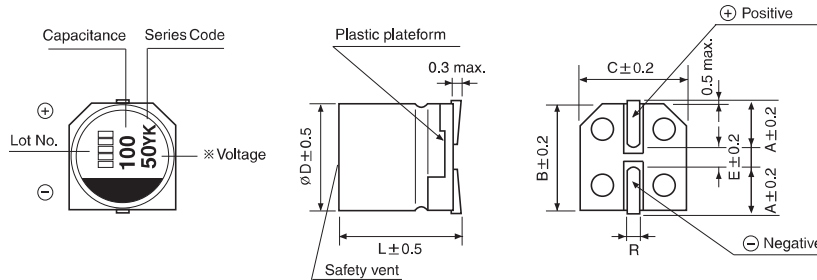
- High temperature compared with YH series
- High temperature range, for 135°C use
- Complied to the RoHS directive
- AEC-Q200 compliant : Please contact us for more details.



Item	Characteristics										
Operating temperature range	-55 ~ +135°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"> <thead> <tr> <th>WV</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> </tr> </thead> <tbody> <tr> <td>$\tan\delta$</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.08</td> </tr> </tbody> </table>	WV	25	35	50	63	$\tan\delta$	0.14	0.12	0.10	0.08
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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(2000 hours for $\phi D=6.3$) at 135°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"> <tbody> <tr> <td>Capacitance change</td> <td>Within $\pm 30\%$ of initial value</td> </tr> <tr> <td>$\tan\delta$</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> </tbody> </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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Shelf life(at 135°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"> <tbody> <tr> <td>Leakage current</td> <td>Less than specified value</td> </tr> <tr> <td>Capacitance change</td> <td>Within $\pm 10\%$ of initial value</td> </tr> <tr> <td>$\tan\delta$</td> <td>Less than specified value</td> </tr> </tbody> </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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DRAWING

Unit : mm



$\phi D \times L$	A	B	C	E	R
6.3×7.7	2.4	6.6	6.6	2.2	0.5~0.8
8×10	2.9	8.3	8.3	3.1	0.8~1.1
10×10	3.2	10.3	10.3	4.5	0.8~1.1
10×12.5	3.2	10.3	10.3	4.5	0.8~1.1

DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

μF	WV	25		35			50			63		
33												
47							8×10	30	1250			
56										10×10	30	1400
68				6.3×7.7	35	1400						
82												
100	6.3×7.7	30	1400				10×10	25	1600			
150				8×10	27	1600						
220												
270	8×10	27	1600	10×10	20	2000						
330	10×10	20	2000	10×12.5	17	2260						
470	10×12.5	16	2260									

Ripple current (mA rms) at 135°C, 100kHz

ESR (mΩ) at 20°C, 100kHz
Case size $\phi D \times L$ (mm)

FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

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