

## HFZ Series LONG LIFE WITH EXTRA ELECTROLYTIC CAPACITOR

Extra lower impedance with temperature range -55~+105°C

Load life of 2000~5000 hours

Impedance 5~25% less than HKZ series

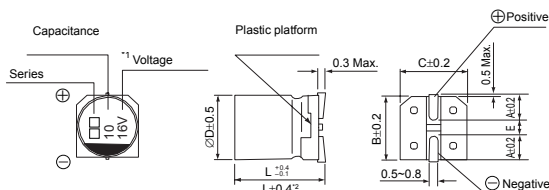
RoHS & REACH compliant, Halogen-free

### SPECIFICATIONS

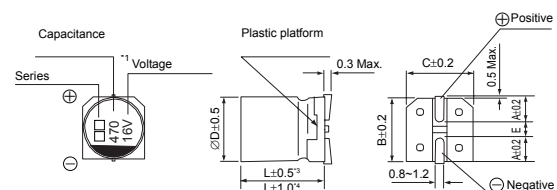
Items	Characteristics																												
Operation Temperature Range	-55 ~ +105°C																												
Voltage Range	6.3 ~ 100V																												
Capacitance Range	3.3 ~ 8200 $\mu$ F																												
Capacitance Tolerance	$\pm$ 20% at 120Hz, 20°C																												
Leakage Current	Leakage current $\leq$ 0.01CV or 3 $\mu$ A ( $\varnothing$ 4~ $\varnothing$ 10), whichever is greater (after 2 minutes application of rated voltage at 20°C) Leakage current $\leq$ 0.03CV or 4 $\mu$ A ( $\varnothing$ 12.5~ $\varnothing$ 18), whichever is greater (after 1 minute application of rated voltage at 20°C) C: Nominal capacitance ( $\mu$ F) , V: Rated voltage (V)																												
Dissipation Factor (tan $\delta$ )	Measurement frequency : 120Hz, Temperature : 20°C <table border="1"> <thead> <tr> <th>Rated Voltage (V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63~80</th> <th>100</th> </tr> </thead> <tbody> <tr> <td rowspan="2">tan <math>\delta</math> (max.)</td> <td><math>\varnothing</math>4~<math>\varnothing</math>10</td> <td>0.26</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.08</td> <td>0.07</td> </tr> <tr> <td><math>\varnothing</math>12.5~<math>\varnothing</math>18</td> <td>0.26</td> <td>0.19</td> <td>0.18</td> <td>0.16</td> <td>0.14</td> <td>0.10</td> <td>0.08</td> <td>0.07</td> </tr> </tbody> </table>	Rated Voltage (V)	6.3	10	16	25	35	50	63~80	100	tan $\delta$ (max.)	$\varnothing$ 4~ $\varnothing$ 10	0.26	0.19	0.16	0.14	0.12	0.10	0.08	0.07	$\varnothing$ 12.5~ $\varnothing$ 18	0.26	0.19	0.18	0.16	0.14	0.10	0.08	0.07
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Load Life	After 5000 hrs. (2000 hrs. for $\varnothing$ 4~ $\varnothing$ 6.3 $\times$ 5.8) application of the rated voltage at 105°C, they meet the characteristics listed below. <table border="1"> <tbody> <tr> <td>Capacitance Change</td> <td>Within <math>\pm</math>30% of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>200% or less of initial specified value</td> </tr> <tr> <td>Leakage Current</td> <td>initial specified value or less</td> </tr> </tbody> </table>	Capacitance Change	Within $\pm$ 30% of initial value	Dissipation Factor	200% or less of initial specified value	Leakage Current	initial specified value or less																						
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Shelf Life	After leaving capacitors under no load at 105°C for 1000 hours, they meet the specified value for load life characteristics listed above.																												
Resistance to Soldering Heat	After reflow soldering and restored at room temperature, they meet the characteristics listed below. <table border="1"> <tbody> <tr> <td>Capacitance Change</td> <td>Within <math>\pm</math>10% of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>initial specified value or less</td> </tr> <tr> <td>Leakage Current</td> <td>initial specified value or less</td> </tr> </tbody> </table>	Capacitance Change	Within $\pm$ 10% of initial value	Dissipation Factor	initial specified value or less	Leakage Current	initial specified value or less																						
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Marking	Black print on the case top.																												

### DRAWING (Unit: mm)

( $\varnothing$ 4~ $\varnothing$ 6.3 $\times$ 7.7)



( $\varnothing$ 8 $\times$ 10.5~ $\varnothing$ 18)



- \*1. Voltage mark for 6.3V is [6V]
- \*2. Applicable to  $\varnothing$ 6.3 $\times$ 7.7
- \*3. Applicable to  $\varnothing$ 8 $\times$ 10.5~ $\varnothing$ 10
- \*4. Applicable to  $\varnothing$ 12.5~ $\varnothing$ 18