

HUW Series

Features

- 135°C, 2,000 ~ 4,000 hours assured
- Low ESR and High ripple current
- RoHS compliance
- AEC-Q200 qualified

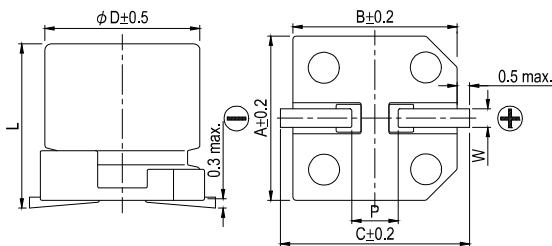


Marking color: Dark Green

Specifications

Items	Performance																			
Category Temperature Range	-55°C ~ +135°C																			
Capacitance Tolerance	±20% (at 120 Hz, 20°C)																			
Leakage Current (at 20°C)	I = 0.01CV or 3 (μA) whichever is greater (after 2 minutes) Where, C = rated capacitance in μF, V = rated DC working voltage in V																			
Tanδ (at 120 Hz, 20°C)	See Standard Ratings																			
Low Temperature Characteristics (at 100k Hz)	Impedance ratio shall not exceed the values given in the table below																			
	<table border="1"> <thead> <tr> <th colspan="2">Rated Voltage</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Impedance ratio</td> <td>Z (-25°C) / Z (+20°C)</td> <td>1.5</td> <td>1.5</td> <td>1.5</td> <td>1.5</td> <td>1.5</td> </tr> <tr> <td>Z (-55°C) / Z (+20°C)</td> <td>2.0</td> <td>2.0</td> <td>2.0</td> <td>2.0</td> <td>2.0</td> </tr> </tbody> </table>	Rated Voltage		16	25	35	50	63	Impedance ratio	Z (-25°C) / Z (+20°C)	1.5	1.5	1.5	1.5	1.5	Z (-55°C) / Z (+20°C)	2.0	2.0	2.0	2.0
Rated Voltage		16	25	35	50	63														
Impedance ratio	Z (-25°C) / Z (+20°C)	1.5	1.5	1.5	1.5	1.5														
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ESR	Less than 200% of specified value																			
Leakage Current	Within specified value																			
Shelf Life Test	* After storage for 1,000 hours at 135 ± 2°C with no voltage applied and then being stabilized at 20°C, capacitors shall meet the limits specified in Endurance. (With voltage treatment)																			
Resistance to Soldering Heat (Please refer to page 15 for reflowsoldering conditions)	<table border="1"> <tbody> <tr> <td>Capacitance Change</td> <td>Within ±10% of initial value</td> </tr> <tr> <td>Tanδ</td> <td>Within specified value</td> </tr> <tr> <td>ESR</td> <td>Within specified value</td> </tr> <tr> <td>Leakage Current</td> <td>Within specified value</td> </tr> </tbody> </table>	Capacitance Change	Within ±10% of initial value	Tanδ	Within specified value	ESR	Within specified value	Leakage Current	Within specified value											
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Ripple Current and Frequency Multipliers	<table border="1"> <thead> <tr> <th>Frequency (Hz)</th> <th>120 ≤ f < 1k</th> <th>1k ≤ f < 10k</th> <th>10k ≤ f < 100k</th> <th>100k ≤ f < 500k</th> </tr> </thead> <tbody> <tr> <td>Multiplier</td> <td>0.1</td> <td>0.3</td> <td>0.6</td> <td>1.0</td> </tr> </tbody> </table>	Frequency (Hz)	120 ≤ f < 1k	1k ≤ f < 10k	10k ≤ f < 100k	100k ≤ f < 500k	Multiplier	0.1	0.3	0.6	1.0									
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Diagram of Dimensions



Lead Spacing and Diameter

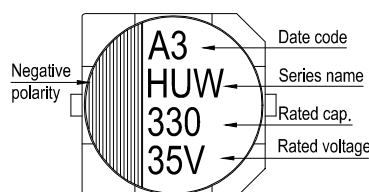
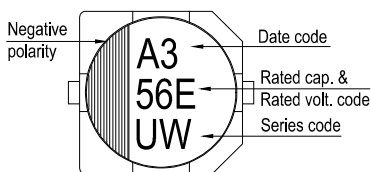
Unit: mm

φ D	L	A	B	C	W	P ± 0.2
6.3	5.8 ± 0.3	6.6	6.6	7.2	0.5 ~ 0.8	2.0
6.3	7.7 ± 0.3	6.6	6.6	7.2	0.5 ~ 0.8	2.0
8	10.0 ± 0.5	8.3	8.3	9.0	0.7 ~ 1.1	3.1
10	10.0 ± 0.5	10.3	10.3	11.0	0.7 ~ 1.3	4.7
10	12.5 ± 0.5	10.3	10.3	11.0	0.7 ~ 1.3	4.7
10	16.5 ± 0.5	10.3	10.3	11.0	0.7 ~ 1.3	4.7

Marking

φ D = 6.3

φ D = 8 ~ 10





Dimension: $\phi D \times L$ (mm)
Ripple Current: mA/rms at 100k Hz

Standard Ratings

Rated Voltage (V)	Surge Voltage (V)	Capacitance (μF)	Size $\phi D \times L$ (mm)	Tan δ (120 Hz, 20°C)	LC (μA)	E S R (m Ω /at 100kHz, 20°C max.)	Rated R. C. (mA/rms at 100k Hz)	
							125°C	135°C
16V (1C)	18.4	82	6.3 × 5.8	0.16	13.1	45	1,700	950
		150	6.3 × 7.7		24.0	27	2,500	1,450
		270	8 × 10		43.2	20	3,050	1,700
		470	10 × 10		75.2	18	3,400	2,100
		560	10 × 12.5		89.6	15	4,200	2,550
25V (1E)	28.8	56	6.3 × 5.8	0.14	14.0	50	1,400	900
		100	6.3 × 7.7		25.0	30	2,100	1,400
		220	8 × 10		55.0	22	2,900	1,600
		330	10 × 10		82.5	20	3,300	2,000
		470	10 × 12.5		117	16	4,050	2,500
		560	10 × 16.5		140	14	4,300	2,500
35V (1V)	40.3	47	6.3 × 5.8	0.12	16.5	60	1,400	900
		68	6.3 × 7.7		23.8	35	2,100	1,400
		150	8 × 10		52.5	22	2,900	1,600
		270	10 × 10		94.5	20	3,300	2,000
		330	10 × 12.5		115	17	3,950	2,400
		470	10 × 16.5		164	14	4,300	2,500
50V (1H)	57.5	33	8 × 10	0.10	16.5	30	2,400	1,250
		47	8 × 10		23.5	30	2,400	1,250
		56	10 × 10		28.0	25	2,900	1,600
		68	8 × 10		34.0	30	2,400	1,250
		100	10 × 10		50.0	25	2,900	1,600
		120	10 × 10		60.0	25	2,900	1,600
		150	10 × 12.5		75.0	19	3,700	2,250
		220	10 × 16.5		110	16	4,100	2,400
63V (1J)	72.5	22	8 × 10	0.08	13.9	40	2,100	1,100
		33	8 × 10		20.8	40	2,100	1,100
		33	10 × 10		20.8	30	2,600	1,400
		47	8 × 10		29.6	40	2,100	1,100
		56	10 × 10		35.3	30	2,600	1,400
		82	10 × 10		51.7	30	2,600	1,400
		100	10 × 12.5		63.0	22	3,450	2,100
		150	10 × 16.5		94.5	16	4,100	2,400

Part Numbering System

HUW Series 470 μF $\pm 20\%$ 25V Carrier Tape 10 $\phi \times 12.5L$ Pb-free and Coated Case

HUW **471** **M** **1E** **TR** - **1013**

Series Name Capacitance Capacitance Tolerance Rated Voltage Package Type Terminal Type Case Size Lead Wire and Case Type

Note: For more details, please refer to "Part Numbering System" on page 87.

单击下面可查看定价，库存，交付和生命周期等信息

[>>LELON\(立隆\)](#)