

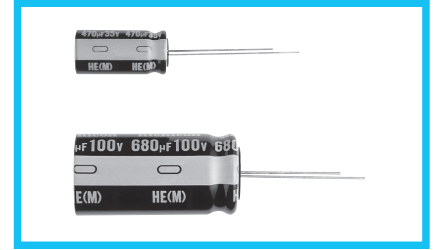
ALUMINUM ELECTROLYTIC CAPACITORS

UHE

Miniature Sized, Low Impedance,
High Reliability



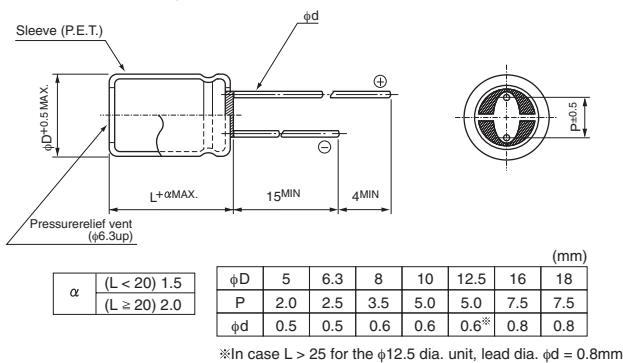
- Low impedance and high reliability withstanding 4000 hours to 10000 hours.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).



Specifications

| Item | Performance Characteristics | | | | | | | | | | |
|---|--|---|------------|------------|-------------|------|------|------|------|---------------|---|
| Category Temperature Range | -40 to +105°C | | | | | | | | | | |
| Rated Voltage Range | 6.3 to 100V | | | | | | | | | | |
| Rated Capacitance Range | 2.2 to 18000μF | | | | | | | | | | |
| Capacitance Tolerance | ±20% at 120Hz, 20°C | | | | | | | | | | |
| Leakage Current | After 2 minutes' application of rated voltage at 20°C, leakage current is not more than 0.01CV or 3 (μA), whichever is greater. | | | | | | | | | | |
| Tangent of loss angle (tan δ) | Rated voltage (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | 120Hz 20°C | |
| | tan δ (MAX.) | 0.22 | 0.19 | 0.16 | 0.14 | 0.12 | 0.10 | 0.09 | 0.08 | | |
| For capacitance of more than 1000μF, add 0.02 for every increase of 1000μF. | | | | | | | | | | | |
| Stability at Low Temperature | Rated voltage (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | 120Hz | |
| | Impedance ratio (MAX.) | Z-25°C/Z+20°C | 4 | 3 | 2 | 2 | 2 | 2 | 2 | | 2 |
| | | Z-40°C/Z+20°C | 8 | 6 | 4 | 3 | 3 | 3 | 3 | 3 | |
| Endurance | The following specifications shall be met when the capacitors are restored to 20°C after D.C. bias plus rated ripple current is applied at 105°C, the peak voltage shall not exceed the rated voltage. | | | | | | | | | | |
| | Case size | φD ≤ 6.3 | φD = 8, 10 | φD ≥ 12.5 | | | | | | | |
| | Rated voltage | 6.3 to 10V | 4000 hours | 6000 hours | 8000 hours | | | | | | |
| | | 16 to 100V | 5000 hours | 7000 hours | 10000 hours | | | | | | |
| | Capacitance change | Within ±25% of the initial capacitance value | | | | | | | | | |
| | tan δ | 200% or less than the initial specified value | | | | | | | | | |
| Leakage current | Less than or equal to the initial specified value | | | | | | | | | | |
| Marking | Printed with white color letter on black sleeve. | | | | | | | | | | |

Radial Lead Type

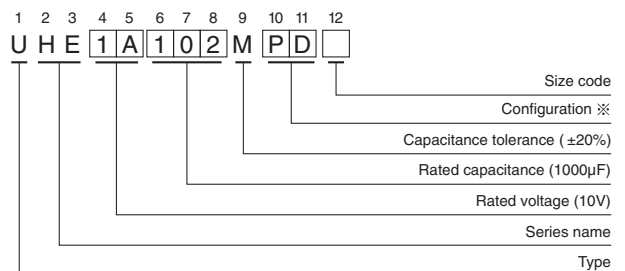


• Please refer to page 18 about the end seal configuration.

Frequency coefficient of rated ripple current

| Cap. (μF) | Frequency | 50Hz | 120Hz | 300Hz | 1kHz | 10kHz or more |
|---------------|-----------|------|-------|-------|------|---------------|
| 2.2 to 33 | | 0.45 | 0.55 | 0.70 | 0.90 | 1.00 |
| 39 to 330 | | 0.60 | 0.70 | 0.85 | 0.95 | 1.00 |
| 390 to 1000 | | 0.65 | 0.75 | 0.90 | 0.98 | 1.00 |
| 1200 to 18000 | | 0.75 | 0.80 | 0.95 | 1.00 | 1.00 |

Type numbering system (Example : 10V 1000μF)



※ Configuration

| φ D | Pb-free leadwire Pb-free PET sleeve |
|------------|--|
| 5 | DD |
| 6.3 | ED |
| 8 - 10 | PD |
| 12.5 to 18 | HD |

● Dimension table in next page.

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■ Dimensions

| Rated Voltage (V) (code) | Rated Capacitance (μ F) | Case Size ϕ D \times L (mm) | tan δ | Leakage Current (μ A) (at 20°C after 2 minutes) | Impedance (Ω) MAX. | | Rated Ripple (mArms) (105°C/100kHz) | Part Number |
|--------------------------------|---------------------------------|---------------------------------------|--------------|---|--------------------------------|------------------|---|--------------|
| | | | | | 20°C/ 100kHz | -10°C/ 100kHz | | |
| 6.3 (0J) | 150 | 5 \times 11 | 0.22 | 9.45 | 0.58 | 2.30 | 210 | UHE0J151MDD |
| | 330 | 6.3 \times 11 | 0.22 | 20.79 | 0.22 | 0.87 | 340 | UHE0J331MED |
| | 680 | 8 \times 11.5 | 0.22 | 42.84 | 0.13 | 0.52 | 640 | UHE0J681MPD |
| | 820 | 10 \times 12.5 | 0.22 | 51.66 | 0.080 | 0.32 | 865 | UHE0J821MPD |
| | 1000 | 8 \times 15 | 0.22 | 63 | 0.087 | 0.35 | 840 | UHE0J102MPD |
| | 1200 | 8 \times 20 | 0.22 | 75.6 | 0.069 | 0.27 | 1050 | UHE0J122MPD |
| | 1200 | 10 \times 16 | 0.22 | 75.6 | 0.060 | 0.24 | 1210 | UHE0J122MPD6 |
| | 1500 | 10 \times 20 | 0.22 | 94.5 | 0.046 | 0.18 | 1400 | UHE0J152MPD |
| | 1800 | 12.5 \times 15 | 0.22 | 113.4 | 0.049 | 0.16 | 1450 | UHE0J182MHD |
| | 2200 | 10 \times 25 | 0.24 | 138.6 | 0.042 | 0.17 | 1650 | UHE0J222MPD |
| | 2700 | 10 \times 31.5 | 0.24 | 170.1 | 0.031 | 0.12 | 1910 | UHE0J272MPD6 |
| | 2700 | 16 \times 15 | 0.24 | 170.1 | 0.042 | 0.12 | 1940 | UHE0J272MHD |
| | 3300 | 12.5 \times 20 | 0.26 | 207.9 | 0.035 | 0.12 | 1900 | UHE0J332MHD |
| | 3900 | 12.5 \times 25 | 0.26 | 245.7 | 0.027 | 0.089 | 2230 | UHE0J392MHD |
| | 3900 | 18 \times 15 | 0.26 | 245.7 | 0.043 | 0.11 | 2210 | UHE0J392MHD6 |
| | 4700 | 12.5 \times 31.5 | 0.28 | 296.1 | 0.024 | 0.078 | 2650 | UHE0J472MHD |
| | 5600 | 12.5 \times 35.5 | 0.30 | 352.8 | 0.020 | 0.065 | 2880 | UHE0J562MHD |
| | 5600 | 16 \times 20 | 0.30 | 352.8 | 0.027 | 0.078 | 2530 | UHE0J562MHD6 |
| | 6800 | 12.5 \times 40 | 0.32 | 428.4 | 0.017 | 0.056 | 3350 | UHE0J682MHD |
| | 6800 | 16 \times 25 | 0.32 | 428.4 | 0.021 | 0.060 | 2930 | UHE0J682MHD6 |
| | 6800 | 18 \times 20 | 0.32 | 428.4 | 0.026 | 0.067 | 2860 | UHE0J682MHD3 |
| | 8200 | 16 \times 31.5 | 0.36 | 516.6 | 0.017 | 0.050 | 3450 | UHE0J822MHD |
| | 10000 | 16 \times 35.5 | 0.40 | 630 | 0.015 | 0.044 | 3610 | UHE0J103MHD |
| | 10000 | 18 \times 25 | 0.40 | 630 | 0.019 | 0.049 | 3140 | UHE0J103MHD6 |
| 12000 | 16 \times 40 | 0.44 | 756 | 0.013 | 0.038 | 4080 | UHE0J123MHD | |
| 12000 | 18 \times 31.5 | 0.44 | 756 | 0.015 | 0.040 | 4170 | UHE0J123MHD6 | |
| 15000 | 18 \times 35.5 | 0.50 | 945 | 0.014 | 0.038 | 4220 | UHE0J153MHD | |
| 18000 | 18 \times 40 | 0.56 | 1134 | 0.012 | 0.032 | 4280 | UHE0J183MHD | |
| 10 (1A) | 100 | 5 \times 11 | 0.19 | 10 | 0.58 | 2.30 | 210 | UHE1A101MDD |
| | 220 | 6.3 \times 11 | 0.19 | 22 | 0.22 | 0.87 | 340 | UHE1A221MED |
| | 470 | 8 \times 11.5 | 0.19 | 47 | 0.13 | 0.52 | 640 | UHE1A471MPD |
| | 680 | 8 \times 15 | 0.19 | 68 | 0.087 | 0.35 | 840 | UHE1A681MPD |
| | 680 | 10 \times 12.5 | 0.19 | 68 | 0.080 | 0.32 | 865 | UHE1A681MPD6 |
| | 1000 | 8 \times 20 | 0.19 | 100 | 0.069 | 0.27 | 1050 | UHE1A102MPD |
| | 1000 | 10 \times 16 | 0.19 | 100 | 0.060 | 0.24 | 1210 | UHE1A102MPD6 |
| | 1200 | 10 \times 20 | 0.19 | 120 | 0.046 | 0.18 | 1400 | UHE1A122MPD |
| | 1500 | 10 \times 25 | 0.19 | 150 | 0.042 | 0.17 | 1650 | UHE1A152MPD |
| | 1500 | 12.5 \times 15 | 0.19 | 150 | 0.049 | 0.16 | 1450 | UHE1A152MHD6 |
| | 2200 | 10 \times 31.5 | 0.21 | 220 | 0.031 | 0.12 | 1910 | UHE1A222MPD |
| | 2200 | 12.5 \times 20 | 0.21 | 220 | 0.035 | 0.12 | 1900 | UHE1A222MHD6 |
| | 2200 | 16 \times 15 | 0.21 | 220 | 0.042 | 0.12 | 1940 | UHE1A222MHD3 |
| | 2700 | 18 \times 15 | 0.21 | 270 | 0.043 | 0.11 | 2210 | UHE1A272MHD |
| | 3300 | 12.5 \times 25 | 0.23 | 330 | 0.027 | 0.089 | 2230 | UHE1A332MHD |
| | 3900 | 12.5 \times 31.5 | 0.23 | 390 | 0.024 | 0.078 | 2650 | UHE1A392MHD |
| | 3900 | 16 \times 20 | 0.23 | 390 | 0.027 | 0.078 | 2530 | UHE1A392MHD6 |
| | 4700 | 12.5 \times 35.5 | 0.25 | 470 | 0.020 | 0.065 | 2880 | UHE1A472MHD |
| | 5600 | 12.5 \times 40 | 0.27 | 560 | 0.017 | 0.056 | 3350 | UHE1A562MHD |
| | 5600 | 16 \times 25 | 0.27 | 560 | 0.021 | 0.060 | 2930 | UHE1A562MHD6 |

For cut leads, formed leads or taped parts, please add the appropriate code after the size code (12th digit).
If there is no size code in the part number, please add size code "1" and then add the appropriate code.

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■ Dimensions

| Rated Voltage (V) (code) | Rated Capacitance (μ F) | Case Size ϕ D×L (mm) | tan δ | Leakage Current (μ A) (at 20°C after 2 minutes) | Impedance (Ω) MAX. | | Rated Ripple (mArms) (105°C/100kHz) | Part Number |
|--------------------------------|---------------------------------|------------------------------|--------------|---|--------------------------------|------------------|---|--------------|
| | | | | | 20°C/ 100kHz | -10°C/ 100kHz | | |
| 10 (1A) | 5600 | 18×20 | 0.27 | 560 | 0.026 | 0.067 | 2860 | UHE1A562MHD3 |
| | 6800 | 16×31.5 | 0.29 | 680 | 0.017 | 0.050 | 3450 | UHE1A682MHD |
| | 6800 | 18×25 | 0.29 | 680 | 0.019 | 0.049 | 3140 | UHE1A682MHD6 |
| | 8200 | 16×35.5 | 0.33 | 820 | 0.015 | 0.044 | 3610 | UHE1A822MHD |
| | 8200 | 18×31.5 | 0.33 | 820 | 0.015 | 0.040 | 4170 | UHE1A822MHD6 |
| | 10000 | 16×40 | 0.37 | 1000 | 0.013 | 0.038 | 4080 | UHE1A103MHD |
| | 10000 | 18×35.5 | 0.37 | 1000 | 0.014 | 0.038 | 4220 | UHE1A103MHD6 |
| | 12000 | 18×40 | 0.41 | 1200 | 0.012 | 0.032 | 4280 | UHE1A123MHD |
| 16 (1C) | 56 | 5×11 | 0.16 | 8.96 | 0.58 | 2.30 | 210 | UHE1C560MDD |
| | 120 | 6.3×11 | 0.16 | 19.2 | 0.22 | 0.87 | 340 | UHE1C121MED |
| | 330 | 8×11.5 | 0.16 | 52.8 | 0.13 | 0.52 | 640 | UHE1C331MPD |
| | 470 | 8×15 | 0.16 | 75.2 | 0.087 | 0.35 | 840 | UHE1C471MPD |
| | 470 | 10×12.5 | 0.16 | 75.2 | 0.080 | 0.32 | 865 | UHE1C471MPD6 |
| | 680 | 8×20 | 0.16 | 108.8 | 0.069 | 0.27 | 1050 | UHE1C681MPD |
| | 680 | 10×16 | 0.16 | 108.8 | 0.060 | 0.24 | 1210 | UHE1C681MPD6 |
| | 1000 | 10×20 | 0.16 | 160 | 0.046 | 0.18 | 1400 | UHE1C102MPD |
| | 1000 | 12.5×15 | 0.16 | 160 | 0.049 | 0.16 | 1450 | UHE1C102MHD6 |
| | 1200 | 10×25 | 0.16 | 192 | 0.042 | 0.17 | 1650 | UHE1C122MPD |
| | 1500 | 10×31.5 | 0.16 | 240 | 0.031 | 0.12 | 1910 | UHE1C152MPD |
| | 1500 | 12.5×20 | 0.16 | 240 | 0.035 | 0.12 | 1900 | UHE1C152MHD6 |
| | 1500 | 16×15 | 0.16 | 240 | 0.042 | 0.12 | 1940 | UHE1C152MHD3 |
| | 2200 | 12.5×25 | 0.18 | 352 | 0.027 | 0.089 | 2230 | UHE1C222MHD |
| | 2200 | 18×15 | 0.18 | 352 | 0.043 | 0.11 | 2210 | UHE1C222MHD6 |
| | 2700 | 12.5×31.5 | 0.18 | 432 | 0.024 | 0.078 | 2650 | UHE1C272MHD |
| | 2700 | 16×20 | 0.18 | 432 | 0.027 | 0.078 | 2530 | UHE1C272MHD6 |
| | 3300 | 12.5×35.5 | 0.20 | 528 | 0.020 | 0.065 | 2880 | UHE1C332MHD |
| | 3900 | 12.5×40 | 0.20 | 624 | 0.017 | 0.056 | 3350 | UHE1C392MHD |
| | 3900 | 16×25 | 0.20 | 624 | 0.021 | 0.060 | 2930 | UHE1C392MHD6 |
| | 3900 | 16×20 | 0.20 | 624 | 0.026 | 0.067 | 2860 | UHE1C392MHD3 |
| | 4700 | 16×31.5 | 0.22 | 752 | 0.017 | 0.050 | 3450 | UHE1C472MHD |
| | 4700 | 18×25 | 0.22 | 752 | 0.019 | 0.049 | 3140 | UHE1C472MHD6 |
| | 5600 | 16×35.5 | 0.24 | 896 | 0.015 | 0.044 | 3610 | UHE1C562MHD |
| 5600 | 18×31.5 | 0.24 | 896 | 0.015 | 0.040 | 4170 | UHE1C562MHD6 | |
| 6800 | 16×40 | 0.26 | 1088 | 0.013 | 0.038 | 4080 | UHE1C682MHD | |
| 8200 | 18×35.5 | 0.30 | 1312 | 0.014 | 0.038 | 4220 | UHE1C822MHD | |
| 10000 | 18×40 | 0.34 | 1600 | 0.012 | 0.032 | 4280 | UHE1C103MHD | |
| 25 (1E) | 47 | 5×11 | 0.14 | 11.75 | 0.58 | 2.30 | 210 | UHE1E470MDD |
| | 100 | 6.3×11 | 0.14 | 25 | 0.22 | 0.87 | 340 | UHE1E101MED |
| | 220 | 8×11.5 | 0.14 | 55 | 0.13 | 0.52 | 640 | UHE1E221MPD |
| | 330 | 8×15 | 0.14 | 82.5 | 0.087 | 0.35 | 840 | UHE1E331MPD |
| | 330 | 10×12.5 | 0.14 | 82.5 | 0.080 | 0.32 | 865 | UHE1E331MPD6 |
| | 470 | 8×20 | 0.14 | 117.5 | 0.069 | 0.27 | 1050 | UHE1E471MPD |
| | 470 | 10×16 | 0.14 | 117.5 | 0.060 | 0.24 | 1210 | UHE1E471MPD6 |
| | 680 | 10×20 | 0.14 | 170 | 0.046 | 0.18 | 1400 | UHE1E681MPD |
| | 680 | 12.5×15 | 0.14 | 170 | 0.049 | 0.16 | 1450 | UHE1E681MHD6 |
| | 820 | 10×25 | 0.14 | 205 | 0.042 | 0.17 | 1650 | UHE1E821MPD |
| | 1000 | 10×31.5 | 0.14 | 250 | 0.031 | 0.12 | 1910 | UHE1E102MPD |
| | 1000 | 12.5×20 | 0.14 | 250 | 0.035 | 0.12 | 1900 | UHE1E102MHD6 |

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If there is no size code in the part number, please add size code "1" and then add the appropriate code.

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■ Dimensions

| Rated Voltage (V) (code) | Rated Capacitance (μF) | Case Size φD×L (mm) | tan δ | Leakage Current (μA) (at 20°C after 2 minutes) | Impedance (Ω) MAX. | | Rated Ripple (mArms) (105°C/100kHz) | Part Number |
|-----------------------------|------------------------|---------------------|-------|---|-----------------------|------------------|--|--------------|
| | | | | | 20°C/ 100kHz | -10°C/ 100kHz | | |
| 25 (1E) | 1000 | 16×15 | 0.14 | 250 | 0.042 | 0.12 | 1940 | UHE1E102MHD3 |
| | 1200 | 18×15 | 0.14 | 300 | 0.043 | 0.11 | 2210 | UHE1E122MHD |
| | 1500 | 12.5×25 | 0.14 | 375 | 0.027 | 0.089 | 2230 | UHE1E152MHD |
| | 1800 | 12.5×31.5 | 0.14 | 450 | 0.024 | 0.078 | 2650 | UHE1E182MHD |
| | 1800 | 16×20 | 0.14 | 450 | 0.027 | 0.078 | 2530 | UHE1E182MHD6 |
| | 2200 | 12.5×35.5 | 0.16 | 550 | 0.020 | 0.065 | 2880 | UHE1E222MHD |
| | 2200 | 18×20 | 0.16 | 550 | 0.026 | 0.067 | 2860 | UHE1E222MHD6 |
| | 2700 | 12.5×40 | 0.16 | 675 | 0.017 | 0.056 | 3350 | UHE1E272MHD |
| | 2700 | 16×25 | 0.16 | 675 | 0.021 | 0.060 | 2930 | UHE1E272MHD6 |
| | 3300 | 16×31.5 | 0.18 | 825 | 0.017 | 0.050 | 3450 | UHE1E332MHD |
| | 3300 | 18×25 | 0.18 | 825 | 0.019 | 0.049 | 3140 | UHE1E332MHD6 |
| | 3900 | 16×35.5 | 0.18 | 975 | 0.015 | 0.044 | 3610 | UHE1E392MHD |
| | 3900 | 18×31.5 | 0.18 | 975 | 0.015 | 0.040 | 4170 | UHE1E392MHD6 |
| | 4700 | 16×40 | 0.20 | 1175 | 0.013 | 0.038 | 4080 | UHE1E472MHD |
| | 4700 | 18×35.5 | 0.20 | 1175 | 0.014 | 0.038 | 4220 | UHE1E472MHD6 |
| 5600 | 18×40 | 0.22 | 1400 | 0.012 | 0.032 | 4280 | UHE1E562MHD | |
| 35 (1V) | 33 | 5×11 | 0.12 | 11.55 | 0.58 | 2.30 | 210 | UHE1V330MDD |
| | 47 | 6.3×11 | 0.12 | 16.45 | 0.22 | 0.87 | 250 | UHE1V470MED |
| | 56 | 6.3×11 | 0.12 | 19.6 | 0.22 | 0.87 | 340 | UHE1V560MED |
| | 100 | 8×11.5 | 0.12 | 35 | 0.13 | 0.52 | 640 | UHE1V101MPD |
| | 150 | 8×11.5 | 0.12 | 52.5 | 0.13 | 0.52 | 640 | UHE1V151MPD |
| | 220 | 8×15 | 0.12 | 77 | 0.087 | 0.35 | 840 | UHE1V221MPD |
| | 220 | 10×12.5 | 0.12 | 77 | 0.080 | 0.32 | 865 | UHE1V221MPD6 |
| | 270 | 8×20 | 0.12 | 94.5 | 0.069 | 0.27 | 1050 | UHE1V271MPD |
| | 330 | 10×16 | 0.12 | 115.5 | 0.060 | 0.24 | 1210 | UHE1V331MPD |
| | 470 | 10×20 | 0.12 | 164.5 | 0.046 | 0.18 | 1400 | UHE1V471MPD |
| | 470 | 12.5×15 | 0.12 | 164.5 | 0.049 | 0.16 | 1450 | UHE1V471MHD6 |
| | 560 | 10×25 | 0.12 | 196 | 0.042 | 0.17 | 1650 | UHE1V561MPD |
| | 680 | 10×31.5 | 0.12 | 238 | 0.031 | 0.12 | 1910 | UHE1V681MPD |
| | 680 | 12.5×20 | 0.12 | 238 | 0.035 | 0.12 | 1900 | UHE1V681MHD6 |
| | 680 | 16×15 | 0.12 | 238 | 0.042 | 0.12 | 1940 | UHE1V681MHD3 |
| | 1000 | 12.5×25 | 0.12 | 350 | 0.027 | 0.089 | 2230 | UHE1V102MHD |
| | 1000 | 18×15 | 0.12 | 350 | 0.043 | 0.11 | 2210 | UHE1V102MHD6 |
| | 1200 | 12.5×31.5 | 0.12 | 420 | 0.024 | 0.078 | 2650 | UHE1V122MHD |
| | 1200 | 16×20 | 0.12 | 420 | 0.027 | 0.078 | 2530 | UHE1V122MHD6 |
| | 1500 | 12.5×35.5 | 0.12 | 525 | 0.020 | 0.065 | 2880 | UHE1V152MHD |
| | 1800 | 12.5×40 | 0.12 | 630 | 0.017 | 0.056 | 3350 | UHE1V182MHD |
| | 1800 | 16×25 | 0.12 | 630 | 0.021 | 0.060 | 2930 | UHE1V182MHD6 |
| | 1800 | 18×20 | 0.12 | 630 | 0.026 | 0.067 | 2860 | UHE1V182MHD3 |
| | 2200 | 16×31.5 | 0.14 | 770 | 0.017 | 0.050 | 3450 | UHE1V222MHD |
| | 2200 | 18×25 | 0.14 | 770 | 0.019 | 0.049 | 3140 | UHE1V222MHD6 |
| | 2700 | 16×35.5 | 0.14 | 945 | 0.015 | 0.044 | 3610 | UHE1V272MHD |
| | 2700 | 18×31.5 | 0.14 | 945 | 0.015 | 0.040 | 4170 | UHE1V272MHD6 |
| 3300 | 16×40 | 0.16 | 1155 | 0.013 | 0.038 | 4080 | UHE1V332MHD | |
| 3300 | 18×35.5 | 0.16 | 1155 | 0.014 | 0.038 | 4220 | UHE1V332MHD6 | |
| 3900 | 18×40 | 0.16 | 1365 | 0.012 | 0.032 | 4280 | UHE1V392MHD | |
| 50 (1H) | 2.2 | 5×11 | 0.10 | 3 | 2.50 | 10.00 | 43 | UHE1H2R2MDD |
| | 3.3 | 5×11 | 0.10 | 3 | 2.20 | 8.80 | 53 | UHE1H3R3MDD |

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■ Dimensions

| Rated Voltage (V) (code) | Rated Capacitance (μF) | Case Size $\phi\text{D}\times\text{L}$ (mm) | $\tan \delta$ | Leakage Current (μA) (at 20°C after 2 minutes) | Impedance (Ω) MAX. | | Rated Ripple (mArms) (105°C/100kHz) | Part Number |
|--------------------------------|--|--|---------------|--|--------------------------------|------------------|---|--------------|
| | | | | | 20°C/ 100kHz | -10°C/ 100kHz | | |
| 50 (1H) | 4.7 | 5×11 | 0.10 | 3 | 1.90 | 7.60 | 88 | UHE1H4R7MDD |
| | 10 | 5×11 | 0.10 | 5 | 1.50 | 6.00 | 100 | UHE1H100MDD |
| | 22 | 5×11 | 0.10 | 11 | 0.70 | 2.80 | 180 | UHE1H220MDD |
| | 33 | 6.3×11 | 0.10 | 16.5 | 0.30 | 1.20 | 295 | UHE1H330MED |
| | 47 | 6.3×11 | 0.10 | 23.5 | 0.30 | 1.20 | 295 | UHE1H470MED |
| | 56 | 6.3×11 | 0.10 | 28 | 0.30 | 1.20 | 295 | UHE1H560MED |
| | 100 | 8×11.5 | 0.10 | 50 | 0.17 | 0.68 | 555 | UHE1H101MPD |
| | 120 | 8×15 | 0.10 | 60 | 0.12 | 0.48 | 730 | UHE1H121MPD |
| | 150 | 10×12.5 | 0.10 | 75 | 0.12 | 0.48 | 760 | UHE1H151MPD |
| | 180 | 8×20 | 0.10 | 90 | 0.091 | 0.36 | 910 | UHE1H181MPD |
| | 220 | 10×16 | 0.10 | 110 | 0.084 | 0.34 | 1050 | UHE1H221MPD |
| | 270 | 10×20 | 0.10 | 135 | 0.060 | 0.24 | 1220 | UHE1H271MPD |
| | 270 | 12.5×15 | 0.10 | 135 | 0.061 | 0.20 | 1260 | UHE1H271MHD6 |
| | 330 | 10×25 | 0.10 | 165 | 0.055 | 0.22 | 1440 | UHE1H331MPD |
| | 330 | 10×20 | 0.10 | 165 | 0.060 | 0.24 | 1220 | UHE1H331MPD6 |
| | 470 | 10×31.5 | 0.10 | 235 | 0.043 | 0.17 | 1690 | UHE1H471MPD |
| | 470 | 12.5×20 | 0.10 | 235 | 0.045 | 0.15 | 1660 | UHE1H471MHD6 |
| | 470 | 16×15 | 0.10 | 235 | 0.055 | 0.17 | 1690 | UHE1H471MHD3 |
| | 560 | 12.5×25 | 0.10 | 280 | 0.034 | 0.11 | 1950 | UHE1H561MHD |
| | 560 | 18×15 | 0.10 | 280 | 0.054 | 0.15 | 1930 | UHE1H561MHD6 |
| | 680 | 12.5×31.5 | 0.10 | 340 | 0.030 | 0.10 | 2310 | UHE1H681MHD |
| | 820 | 12.5×35.5 | 0.10 | 410 | 0.025 | 0.083 | 2510 | UHE1H821MHD |
| | 820 | 16×20 | 0.10 | 410 | 0.034 | 0.10 | 2210 | UHE1H821MHD6 |
| | 1000 | 12.5×40 | 0.10 | 500 | 0.021 | 0.069 | 2920 | UHE1H102MHD |
| | 1000 | 16×25 | 0.10 | 500 | 0.025 | 0.075 | 2555 | UHE1H102MHD6 |
| | 1000 | 18×20 | 0.10 | 500 | 0.036 | 0.097 | 2490 | UHE1H102MHD3 |
| | 1200 | 16×31.5 | 0.10 | 600 | 0.022 | 0.066 | 3010 | UHE1H122MHD |
| | 1200 | 18×25 | 0.10 | 600 | 0.026 | 0.070 | 2740 | UHE1H122MHD6 |
| 1500 | 16×35.5 | 0.10 | 750 | 0.019 | 0.057 | 3150 | UHE1H152MHD | |
| 1800 | 16×40 | 0.10 | 900 | 0.016 | 0.048 | 3710 | UHE1H182MHD | |
| 1800 | 18×31.5 | 0.10 | 900 | 0.021 | 0.057 | 3635 | UHE1H182MHD6 | |
| 2200 | 18×35.5 | 0.12 | 1100 | 0.017 | 0.046 | 3680 | UHE1H222MHD6 | |
| 2700 | 18×40 | 0.12 | 1350 | 0.014 | 0.038 | 3800 | UHE1H272MHD | |
| 63 (1J) | 15 | 5×11 | 0.09 | 9.45 | 2.30 | 9.30 | 62 | UHE1J150MDD |
| | 33 | 6.3×11 | 0.09 | 20.79 | 1.20 | 5.00 | 126 | UHE1J330MED |
| | 47 | 8×11.5 | 0.09 | 29.61 | 0.63 | 2.80 | 260 | UHE1J470MPD |
| | 56 | 8×11.5 | 0.09 | 35.28 | 0.63 | 2.80 | 260 | UHE1J560MPD |
| | 82 | 8×15 | 0.09 | 51.66 | 0.45 | 2.10 | 335 | UHE1J820MPD |
| | 82 | 10×12.5 | 0.09 | 51.66 | 0.43 | 1.80 | 325 | UHE1J820MPD6 |
| | 120 | 8×20 | 0.09 | 75.6 | 0.33 | 1.60 | 408 | UHE1J121MPD |
| | 120 | 10×16 | 0.09 | 75.6 | 0.31 | 1.50 | 400 | UHE1J121MPD6 |
| | 180 | 10×20 | 0.09 | 113.4 | 0.21 | 0.94 | 518 | UHE1J181MPD |
| | 180 | 12.5×15 | 0.09 | 113.4 | 0.23 | 1.10 | 527 | UHE1J181MHD6 |
| | 220 | 10×25 | 0.09 | 138.6 | 0.20 | 0.84 | 595 | UHE1J221MPD |
| | 270 | 10×31.5 | 0.09 | 170.1 | 0.15 | 0.71 | 740 | UHE1J271MPD |
| | 270 | 12.5×20 | 0.09 | 170.1 | 0.16 | 0.64 | 765 | UHE1J271MHD6 |
| | 270 | 16×15 | 0.09 | 170.1 | 0.14 | 0.66 | 895 | UHE1J271MHD3 |
| | 330 | 12.5×25 | 0.09 | 207.9 | 0.12 | 0.45 | 875 | UHE1J331MHD |

For cut leads, formed leads or taped parts, please add the appropriate code after the size code (12th digit).
If there is no size code in the part number, please add size code "1" and then add the appropriate code.

UHE

■ Dimensions

| Rated Voltage (V) (code) | Rated Capacitance (μF) | Case Size φD×L (mm) | tan δ | Leakage Current (μA) (at 20°C after 2 minutes) | Impedance (Ω) MAX. | | Rated Ripple (mA rms) (105°C/100kHz) | Part Number |
|-----------------------------|------------------------|---------------------|-------|---|-----------------------|------------------|---|--------------|
| | | | | | 20°C/ 100kHz | -10°C/ 100kHz | | |
| 63 (1J) | 390 | 18×15 | 0.09 | 245.7 | 0.12 | 0.50 | 1030 | UHE1J391MHD |
| | 470 | 12.5×31.5 | 0.09 | 296.1 | 0.10 | 0.42 | 1010 | UHE1J471MHD |
| | 470 | 16×20 | 0.09 | 296.1 | 0.091 | 0.38 | 1130 | UHE1J471MHD6 |
| | 560 | 12.5×35.5 | 0.09 | 352.8 | 0.083 | 0.35 | 1140 | UHE1J561MHD |
| | 560 | 16×25 | 0.09 | 352.8 | 0.073 | 0.27 | 1350 | UHE1J561MHD6 |
| | 680 | 12.5×40 | 0.09 | 428.4 | 0.071 | 0.30 | 1280 | UHE1J681MHD |
| | 680 | 18×20 | 0.09 | 428.4 | 0.080 | 0.30 | 1300 | UHE1J681MHD6 |
| | 820 | 16×31.5 | 0.09 | 516.6 | 0.054 | 0.20 | 1650 | UHE1J821MHD |
| | 820 | 18×25 | 0.09 | 516.6 | 0.057 | 0.21 | 1560 | UHE1J821MHD6 |
| | 1000 | 16×35.5 | 0.09 | 630 | 0.045 | 0.17 | 1900 | UHE1J102MHD |
| | 1000 | 18×31.5 | 0.09 | 630 | 0.047 | 0.17 | 1720 | UHE1J102MHD6 |
| | 1200 | 16×40 | 0.09 | 756 | 0.040 | 0.15 | 2130 | UHE1J122MHD |
| | 1200 | 18×35.5 | 0.09 | 756 | 0.040 | 0.15 | 1890 | UHE1J122MHD6 |
| | 1500 | 18×40 | 0.09 | 945 | 0.036 | 0.13 | 2470 | UHE1J152MHD |
| 100 (2A) | 6.8 | 5×11 | 0.08 | 6.8 | 2.30 | 9.30 | 62 | UHE2A6R8MDD |
| | 15 | 6.3×11 | 0.08 | 15 | 1.20 | 5.00 | 126 | UHE2A150MED |
| | 27 | 8×11.5 | 0.08 | 27 | 0.63 | 2.80 | 260 | UHE2A270MPD |
| | 39 | 8×15 | 0.08 | 39 | 0.45 | 2.10 | 335 | UHE2A390MPD |
| | 47 | 10×12.5 | 0.08 | 47 | 0.43 | 1.80 | 325 | UHE2A470MPD |
| | 56 | 8×20 | 0.08 | 56 | 0.33 | 1.60 | 408 | UHE2A560MPD |
| | 68 | 10×16 | 0.08 | 68 | 0.31 | 1.50 | 400 | UHE2A680MPD |
| | 82 | 10×20 | 0.08 | 82 | 0.21 | 0.94 | 518 | UHE2A820MPD |
| | 82 | 12.5×15 | 0.08 | 82 | 0.23 | 1.10 | 527 | UHE2A820MHD6 |
| | 100 | 10×25 | 0.08 | 100 | 0.20 | 0.84 | 595 | UHE2A101MPD |
| | 100 | 12.5×20 | 0.08 | 100 | 0.20 | 0.84 | 740 | UHE2A101MHD6 |
| | 120 | 10×31.5 | 0.08 | 120 | 0.15 | 0.71 | 740 | UHE2A121MPD |
| | 120 | 12.5×20 | 0.08 | 120 | 0.16 | 0.64 | 765 | UHE2A121MHD6 |
| | 150 | 16×15 | 0.08 | 150 | 0.14 | 0.66 | 895 | UHE2A151MHD |
| | 180 | 12.5×25 | 0.08 | 180 | 0.12 | 0.45 | 875 | UHE2A181MHD |
| | 180 | 18×15 | 0.08 | 180 | 0.12 | 0.50 | 1030 | UHE2A181MHD6 |
| | 220 | 12.5×31.5 | 0.08 | 220 | 0.10 | 0.42 | 1010 | UHE2A221MHD |
| | 220 | 16×20 | 0.08 | 220 | 0.091 | 0.38 | 1130 | UHE2A221MHD6 |
| | 270 | 12.5×35.5 | 0.08 | 270 | 0.083 | 0.35 | 1140 | UHE2A271MHD |
| | 270 | 16×25 | 0.08 | 270 | 0.073 | 0.27 | 1350 | UHE2A271MHD6 |
| | 330 | 12.5×40 | 0.08 | 330 | 0.071 | 0.30 | 1280 | UHE2A331MHD |
| | 330 | 18×20 | 0.08 | 330 | 0.080 | 0.30 | 1300 | UHE2A331MHD6 |
| | 390 | 16×31.5 | 0.08 | 390 | 0.054 | 0.20 | 1650 | UHE2A391MHD |
| | 390 | 18×25 | 0.08 | 390 | 0.057 | 0.21 | 1560 | UHE2A391MHD6 |
| 470 | 16×35.5 | 0.08 | 470 | 0.045 | 0.17 | 1900 | UHE2A471MHD | |
| 470 | 18×31.5 | 0.08 | 470 | 0.047 | 0.17 | 1720 | UHE2A471MHD6 | |
| 560 | 16×40 | 0.08 | 560 | 0.040 | 0.15 | 2130 | UHE2A561MHD | |
| 680 | 18×35.5 | 0.08 | 680 | 0.040 | 0.15 | 1890 | UHE2A681MHD | |
| 820 | 18×40 | 0.08 | 820 | 0.036 | 0.13 | 2470 | UHE2A821MHD | |

For cut leads, formed leads or taped parts, please add the appropriate code after the size code (12th digit).
If there is no size code in the part number, please add size code "1" and then add the appropriate code.

Please refer to page 18, 19 about the formed or taped product spec.
Please refer to page 4 for the minimum order quantity.

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