nichicon

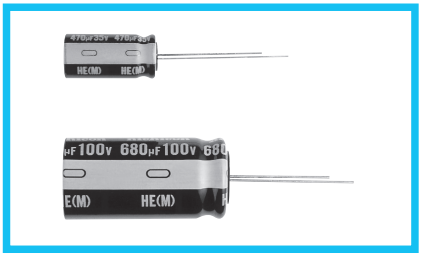
# UHE

Miniature Sized, Low Impedance, High Reliability

Smaller | Low Impedance | Long Life | Anti-Solvent Feature

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

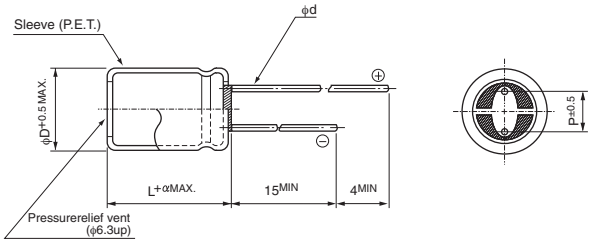
UHE ← Long Life → UHD



## ■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 (V) | 6.3 to 10WV | 4000 hours | | 6000 hours | | 8000 hours | | | | |
| | | 16 to 100WV | 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




| α | |
|---|---|
| | (L < 20) 1.5 |
| | (L ≧ 20) 2.0 |

(mm)

| φD | 5 | 6.3 | 8 | 10 | 12.5 | 16 | 18 |
|---|---|---|---|---|---|---|---|
| P | 2.0 | 2.5 | 3.5 | 5.0 | 5.0 | 7.5 | 7.5 |
| φd | 0.5 | 0.5 | 0.6 | 0.6 | 0.6※ | 0.8 | 0.8 |

※In case L > 25 for the φ12.5 dia. unit, lead dia. φd = 0.8mm

• Please refer to page 20 about the end seal configuration.

## Type numbering system (Example : 10V 1000μF)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| U | H | E | 1 | A | 1 | 0 | 2 | M | P | D | |

- 12: Size code
- 10, 11: Configuration ※
- 9: Capacitance tolerance ( ±20%)
- 6, 7, 8: Rated capacitance (1000μF)
- 4, 5: Rated voltage (10V)
- 1, 2, 3: Series name
- Type

※ Configuration

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

## ● 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 |

Please refer to page 20, 21, 22 about the formed or taped product spec.
Please refer to page 4 for the minimum order quantity.

●Dimension table in next page.

# UHE

## Dimensions

| Cap.(μF) \ V (Code) / Item / Code | | 6.3 (0J) | | | | 10 (1A) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Case size φD × L (mm) | Impedance (Ω) MAX. | | Rated ripple (mArms) | Case size φD × L (mm) | Impedance (Ω) MAX. | | Rated ripple (mArms) |
| | | | 20˚C / 100kHz | –10˚C / 100kHz | 105˚C / 100kHz | | 20˚C / 100kHz | –10˚C / 100kHz | 105˚C / 100kHz |
| **100** | 101 | | | | | 5 × 11 | 0.58 | 2.3 | 210 |
| **150** | 151 | 5 × 11 | 0.58 | 2.3 | 210 | | | | |
| **220** | 221 | | | | | 6.3 × 11 | 0.22 | 0.87 | 340 |
| **330** | 331 | 6.3 × 11 | 0.22 | 0.87 | 340 | | | | |
| **470** | 471 | | | | | 8 × 11.5 | 0.13 | 0.52 | 640 |
| **680** | 681 | 8 × 11.5 | 0.13 | 0.52 | 640 | 8 × 15 | 0.087 | 0.35 | 840 |
| | | | | | | ▲10 × 12.5 | 0.080 | 0.32 | 865 |
| **820** | 821 | 10 × 12.5 | 0.080 | 0.32 | 865 | | | | |
| **1000** | 102 | 8 × 15 | 0.087 | 0.35 | 840 | 8 × 20 | 0.069 | 0.27 | 1050 |
| | | | | | | ▲ 10 × 16 | 0.060 | 0.24 | 1210 |
| **1200** | 122 | 8 × 20 | 0.069 | 0.27 | 1050 | 10 × 20 | 0.046 | 0.18 | 1400 |
| | | ▲10 × 16 | 0.060 | 0.24 | 1210 | | | | |
| **1500** | 152 | 10 × 20 | 0.046 | 0.18 | 1400 | 10 × 25 | 0.042 | 0.17 | 1650 |
| | | | | | | ▲12.5 × 15 | 0.049 | 0.16 | 1450 |
| **1800** | 182 | 12.5 × 15 | 0.049 | 0.16 | 1450 | | | | |
| **2200** | 222 | 10 × 25 | 0.042 | 0.17 | 1650 | 10 × 31.5 | 0.031 | 0.12 | 1910 |
| | | | | | | ▲12.5 × 20 | 0.035 | 0.12 | 1900 |
| | | | | | | ● 16 × 15 | 0.042 | 0.12 | 1940 |
| **2700** | 272 | ▲10 × 31.5 | 0.031 | 0.12 | 1910 | 18 × 15 | 0.043 | 0.11 | 2210 |
| | | 16 × 15 | 0.042 | 0.12 | 1940 | | | | |
| **3300** | 332 | 12.5 × 20 | 0.035 | 0.12 | 1900 | 12.5 × 25 | 0.027 | 0.089 | 2230 |
| **3900** | 392 | 12.5 × 25 | 0.027 | 0.089 | 2230 | 12.5 × 31.5 | 0.024 | 0.078 | 2650 |
| | | ▲18 × 15 | 0.043 | 0.11 | 2210 | ▲16 × 20 | 0.027 | 0.078 | 2530 |
| **4700** | 472 | 12.5 × 31.5 | 0.024 | 0.078 | 2650 | 12.5 × 35.5 | 0.020 | 0.065 | 2880 |
| **5600** | 562 | 12.5 × 35.5 | 0.020 | 0.065 | 2880 | 12.5 × 40 | 0.017 | 0.056 | 3350 |
| | | ▲16 × 20 | 0.027 | 0.078 | 2530 | ▲16 × 25 | 0.021 | 0.060 | 2930 |
| | | | | | | ● 18 × 20 | 0.026 | 0.067 | 2860 |
| **6800** | 682 | 12.5 × 40 | 0.017 | 0.056 | 3350 | 16 × 31.5 | 0.017 | 0.050 | 3450 |
| | | ▲16 × 25 | 0.021 | 0.060 | 2930 | | | | |
| | | ●18 × 20 | 0.026 | 0.067 | 2860 | ▲18 × 25 | 0.019 | 0.049 | 3140 |
| **8200** | 822 | 16 × 31.5 | 0.017 | 0.050 | 3450 | 16 × 35.5 | 0.015 | 0.044 | 3610 |
| | | | | | | ▲18 × 31.5 | 0.015 | 0.040 | 4170 |
| **10000** | 103 | 16 × 35.5 | 0.015 | 0.044 | 3610 | 16 × 40 | 0.013 | 0.038 | 4080 |
| | | ▲18 × 25 | 0.019 | 0.049 | 3140 | ▲ 18 × 35.5 | 0.014 | 0.038 | 4220 |
| **12000** | 123 | 16 × 40 | 0.013 | 0.038 | 4080 | 18 × 40 | 0.012 | 0.032 | 4280 |
| | | ▲18 × 31.5 | 0.015 | 0.040 | 4170 | | | | |
| **15000** | 153 | 18 × 35.5 | 0.014 | 0.038 | 4220 | | | | |
| **18000** | 183 | 18 × 40 | 0.012 | 0.032 | 4280 | | | | |

▲: In this case, 6 will be put at 12th digit of type numbering system.
●: In this case, 3 will be put at 12th digit of type numbering system.

# UHE

## Dimensions

| Cap.(μF) \ V (Code) / Item / Code | 16 (1C) | | | | 25 (1E) | | | |
|---|---|---|---|---|---|---|---|---|
| | Case size φD × L (mm) | Impedance (Ω) MAX. | | Rated ripple (mArms) | Case size φD × L (mm) | Impedance (Ω) MAX. | | Rated ripple (mArms) |
| | | 20˚C / 100kHz | –10˚C / 100kHz | 105˚C / 100kHz | | 20˚C / 100kHz | –10˚C / 100kHz | 105˚C / 100kHz |
| **47** 470 | | | | | 5 × 11 | 0.58 | 2.3 | 210 |
| **56** 560 | 5 × 11 | 0.58 | 2.3 | 210 | | | | |
| **100** 101 | | | | | 6.3 × 11 | 0.22 | 0.87 | 340 |
| **120** 121 | 6.3 × 11 | 0.22 | 0.87 | 340 | | | | |
| **220** 221 | | | | | 8 × 11.5 | 0.13 | 0.52 | 640 |
| **330** 331 | 8 × 11.5 | 0.13 | 0.52 | 640 | 8 × 15 | 0.087 | 0.35 | 840 |
| | | | | | ▲ 10 × 12.5 | 0.080 | 0.32 | 865 |
| **470** 471 | 8 × 15 | 0.087 | 0.35 | 840 | 8 × 20 | 0.069 | 0.27 | 1050 |
| | ▲ 10 × 12.5 | 0.080 | 0.32 | 865 | ▲ 10 × 16 | 0.06 | 0.24 | 1210 |
| **680** 681 | 8 × 20 | 0.069 | 0.27 | 1050 | 10 × 20 | 0.046 | 0.18 | 1400 |
| | ▲ 10 × 16 | 0.060 | 0.24 | 1210 | ▲ 12.5 × 15 | 0.049 | 0.16 | 1450 |
| **820** 821 | | | | | 10 × 25 | 0.042 | 0.17 | 1650 |
| **1000** 102 | 10 × 20 | 0.046 | 0.18 | 1400 | 10 × 31.5 | 0.031 | 0.12 | 1910 |
| | ▲ 12.5 × 15 | 0.049 | 0.16 | 1450 | ▲ 12.5 × 20 | 0.035 | 0.12 | 1900 |
| | | | | | ● 16 × 15 | 0.042 | 0.12 | 1940 |
| **1200** 122 | 10 × 25 | 0.042 | 0.17 | 1650 | 18 × 15 | 0.043 | 0.11 | 2210 |
| **1500** 152 | 10 × 31.5 | 0.031 | 0.12 | 1910 | 12.5 × 25 | 0.027 | 0.089 | 2230 |
| | ▲ 12.5 × 20 | 0.035 | 0.12 | 1900 | | | | |
| | ● 16 × 15 | 0.042 | 0.12 | 1940 | | | | |
| **1800** 182 | | | | | 12.5 × 31.5 | 0.024 | 0.078 | 2650 |
| | | | | | ▲ 16 × 20 | 0.027 | 0.078 | 2530 |
| **2200** 222 | 12.5 × 25 | 0.027 | 0.089 | 2230 | 12.5 × 35.5 | 0.020 | 0.065 | 2880 |
| | ▲ 18 × 15 | 0.043 | 0.11 | 2210 | ▲ 18 × 20 | 0.026 | 0.067 | 2860 |
| **2700** 272 | 12.5 × 31.5 | 0.024 | 0.078 | 2650 | 12.5 × 40 | 0.017 | 0.056 | 3350 |
| | ▲ 16 × 20 | 0.027 | 0.078 | 2530 | ▲ 16 × 25 | 0.021 | 0.060 | 2930 |
| **3300** 332 | 12.5 × 35.5 | 0.020 | 0.065 | 2880 | 16 × 31.5 | 0.017 | 0.050 | 3450 |
| | | | | | ▲ 18 × 25 | 0.019 | 0.049 | 3140 |
| **3900** 392 | 12.5 × 40 | 0.017 | 0.056 | 3350 | 16 × 35.5 | 0.015 | 0.044 | 3610 |
| | ▲ 16 × 25 | 0.021 | 0.060 | 2930 | | | | |
| | ● 16 × 20 | 0.026 | 0.067 | 2860 | ▲ 18 × 31.5 | 0.015 | 0.040 | 4170 |
| **4700** 472 | 16 × 31.5 | 0.017 | 0.050 | 3450 | 16 × 40 | 0.013 | 0.038 | 4080 |
| | ▲ 18 × 25 | 0.019 | 0.049 | 3140 | ▲ 18 × 35.5 | 0.014 | 0.038 | 4220 |
| **5600** 562 | 16 × 35.5 | 0.015 | 0.044 | 3610 | 18 × 40 | 0.012 | 0.032 | 4280 |
| | ▲ 18 × 31.5 | 0.015 | 0.040 | 4170 | | | | |
| **6800** 682 | 16 × 40 | 0.013 | 0.038 | 4080 | | | | |
| **8200** 822 | 18 × 35.5 | 0.014 | 0.038 | 4220 | | | | |
| **10000** 103 | 18 × 40 | 0.012 | 0.032 | 4280 | | | | |

▲ : In this case, 6 will be put at 12th digit of type numbering system.
● : In this case, 3 will be put at 12th digit of type numbering system.

# UHE

## Dimensions

| Cap.(μF) | Code | 35 (1V) Case size φD × L (mm) | 35 (1V) Impedance (Ω) MAX. 20˚C / 100kHz | 35 (1V) Impedance (Ω) MAX. –10˚C / 100kHz | 35 (1V) Rated ripple (mArms) 105˚C / 100kHz | 50 (1H) Case size φD × L (mm) | 50 (1H) Impedance (Ω) MAX. 20˚C / 100kHz | 50 (1H) Impedance (Ω) MAX. –10˚C / 100kHz | 50 (1H) Rated ripple (mArms) 105˚C / 100kHz |
|---|---|---|---|---|---|---|---|---|---|
| **2.2** | 2R2 | | | | | 5 × 11 | 2.5 | 10 | 43 |
| **3.3** | 3R3 | | | | | 5 × 11 | 2.2 | 8.8 | 53 |
| **4.7** | 4R7 | | | | | 5 × 11 | 1.9 | 7.6 | 88 |
| **10** | 100 | | | | | 5 × 11 | 1.5 | 6 | 100 |
| **22** | 220 | | | | | 5 × 11 | 0.70 | 2.8 | 180 |
| **33** | 330 | 5 × 11 | 0.58 | 2.3 | 210 | 6.3 × 11 | 0.30 | 1.2 | 295 |
| **47** | 470 | 6.3 × 11 | 0.22 | 0.87 | 250 | 6.3 × 11 | 0.30 | 1.2 | 295 |
| **56** | 560 | 6.3 × 11 | 0.22 | 0.87 | 340 | 6.3 × 11 | 0.30 | 1.2 | 295 |
| **100** | 101 | 8 × 11.5 | 0.13 | 0.52 | 640 | 8 × 11.5 | 0.17 | 0.68 | 555 |
| **120** | 121 | | | | | 8 × 15 | 0.12 | 0.48 | 730 |
| **150** | 151 | 8 × 11.5 | 0.13 | 0.52 | 640 | 10 × 12.5 | 0.12 | 0.48 | 760 |
| **180** | 181 | | | | | 8 × 20 | 0.091 | 0.36 | 910 |
| **220** | 221 | 8 × 15 | 0.087 | 0.35 | 840 | 10 × 16 | 0.084 | 0.34 | 1050 |
| | | ▲ 10 × 12.5 | 0.080 | 0.32 | 865 | | | | |
| **270** | 271 | 8 × 20 | 0.069 | 0.27 | 1050 | 10 × 20 | 0.060 | 0.24 | 1220 |
| | | | | | | ▲ 12.5 × 15 | 0.061 | 0.20 | 1260 |
| **330** | 331 | 10 × 16 | 0.060 | 0.24 | 1210 | 10 × 25 | 0.055 | 0.22 | 1440 |
| | | | | | | ▲ 10 × 20 | 0.060 | 0.24 | 1220 |
| **470** | 471 | 10 × 20 | 0.046 | 0.18 | 1400 | 10 × 31.5 | 0.043 | 0.17 | 1690 |
| | | ▲ 12.5 × 15 | 0.049 | 0.16 | 1450 | ▲ 12.5 × 20 | 0.045 | 0.15 | 1660 |
| | | | | | | ● 16 × 15 | 0.055 | 0.17 | 1690 |
| **560** | 561 | 10 × 25 | 0.042 | 0.17 | 1650 | 12.5 × 25 | 0.034 | 0.11 | 1950 |
| | | | | | | ▲ 18 × 15 | 0.054 | 0.15 | 1930 |
| **680** | 681 | 10 × 31.5 | 0.031 | 0.12 | 1910 | 12.5 × 31.5 | 0.030 | 0.10 | 2310 |
| | | ▲ 12.5 × 20 | 0.035 | 0.12 | 1900 | | | | |
| | | ● 16 × 15 | 0.042 | 0.12 | 1940 | | | | |
| **820** | 821 | | | | | 12.5 × 35.5 | 0.025 | 0.083 | 2510 |
| | | | | | | ▲ 16 × 20 | 0.034 | 0.10 | 2210 |
| **1000** | 102 | 12.5 × 25 | 0.027 | 0.089 | 2230 | 12.5 × 40 | 0.021 | 0.069 | 2920 |
| | | ▲ 18 × 15 | 0.043 | 0.11 | 2210 | ▲ 16 × 25 | 0.025 | 0.075 | 2555 |
| | | | | | | ● 18 × 20 | 0.036 | 0.097 | 2490 |
| **1200** | 122 | 12.5 × 31.5 | 0.024 | 0.078 | 2650 | 16 × 31.5 | 0.022 | 0.066 | 3010 |
| | | ▲ 16 × 20 | 0.027 | 0.078 | 2530 | ▲ 18 × 25 | 0.026 | 0.070 | 2740 |
| **1500** | 152 | 12.5 × 35.5 | 0.020 | 0.065 | 2880 | 16 × 35.5 | 0.019 | 0.057 | 3150 |
| **1800** | 182 | 12.5 × 40 | 0.017 | 0.056 | 3350 | 16 × 40 | 0.016 | 0.048 | 3710 |
| | | ▲ 16 × 25 | 0.021 | 0.060 | 2930 | | | | |
| | | ● 18 × 20 | 0.026 | 0.067 | 2860 | ▲ 18 × 31.5 | 0.021 | 0.057 | 3635 |
| **2200** | 222 | 16 × 31.5 | 0.017 | 0.050 | 3450 | ▲ 18 × 35.5 | 0.017 | 0.046 | 3680 |
| | | ▲ 18 × 25 | 0.019 | 0.049 | 3140 | | | | |
| **2700** | 272 | 16 × 35.5 | 0.015 | 0.044 | 3610 | 18 × 40 | 0.014 | 0.038 | 3800 |
| | | ▲ 18 × 31.5 | 0.015 | 0.040 | 4170 | | | | |
| **3300** | 332 | 16 × 40 | 0.013 | 0.038 | 4080 | | | | |
| | | ▲ 18 × 35.5 | 0.014 | 0.038 | 4220 | | | | |
| **3900** | 392 | 18 × 40 | 0.012 | 0.032 | 4280 | | | | |

▲ : In this case, 6 will be put at 12th digit of type numbering system.
● : In this case, 3 will be put at 12th digit of type numbering system.

# UHE

## Dimensions

| Cap.(μF) | Code | 63 (1J) Case size φD × L (mm) | 63 (1J) Impedance (Ω) MAX. 20˚C / 100kHz | 63 (1J) Impedance (Ω) MAX. –10˚C / 100kHz | 63 (1J) Rated ripple (mArms) 105˚C / 100kHz | 100 (2A) Case size φD × L (mm) | 100 (2A) Impedance (Ω) MAX. 20˚C / 100kHz | 100 (2A) Impedance (Ω) MAX. –10˚C / 100kHz | 100 (2A) Rated ripple (mArms) 105˚C / 100kHz |
|---|---|---|---|---|---|---|---|---|---|
| **6.8** | 6R8 | | | | | 5 × 11 | 2.3 | 9.3 | 62 |
| **15** | 150 | 5 × 11 | 2.3 | 9.3 | 62 | 6.3 × 11 | 1.2 | 5.0 | 126 |
| **27** | 270 | | | | | 8 × 11.5 | 0.63 | 2.8 | 260 |
| **33** | 330 | 6.3 × 11 | 1.2 | 5.0 | 126 | | | | |
| **39** | 390 | | | | | 8 × 15 | 0.45 | 2.1 | 335 |
| **47** | 470 | 8 × 11.5 | 0.63 | 2.8 | 260 | 10 × 12.5 | 0.43 | 1.8 | 325 |
| **56** | 560 | 8 × 11.5 | 0.63 | 2.8 | 260 | 8 × 20 | 0.33 | 1.6 | 408 |
| **68** | 680 | | | | | 10 × 16 | 0.31 | 1.5 | 400 |
| **82** | 820 | 8 × 15 | 0.45 | 2.1 | 335 | 10 × 20 | 0.21 | 0.94 | 518 |
| | | ▲10 × 12.5 | 0.43 | 1.8 | 325 | ▲12.5 × 15 | 0.23 | 1.1 | 527 |
| **100** | 101 | | | | | 10 × 25 | 0.20 | 0.84 | 595 |
| | | | | | | ▲12.5 × 20 | 0.20 | 0.84 | 740 |
| **120** | 121 | 8 × 20 | 0.33 | 1.6 | 408 | 10 × 31.5 | 0.15 | 0.71 | 740 |
| | | ▲10 × 16 | 0.31 | 1.5 | 400 | ▲12.5 × 20 | 0.16 | 0.64 | 765 |
| **150** | 151 | | | | | 16 × 15 | 0.14 | 0.66 | 895 |
| **180** | 181 | 10 × 20 | 0.21 | 0.94 | 518 | 12.5 × 25 | 0.12 | 0.45 | 875 |
| | | ▲12.5 × 15 | 0.23 | 1.1 | 527 | ▲18 × 15 | 0.12 | 0.50 | 1030 |
| **220** | 221 | 10 × 25 | 0.20 | 0.84 | 595 | 12.5 × 31.5 | 0.10 | 0.42 | 1010 |
| | | | | | | ▲16 × 20 | 0.091 | 0.38 | 1130 |
| **270** | 271 | 10 × 31.5 | 0.15 | 0.71 | 740 | 12.5 × 35.5 | 0.083 | 0.35 | 1140 |
| | | ▲12.5 × 20 | 0.16 | 0.64 | 765 | | | | |
| | | ● 16 × 15 | 0.14 | 0.66 | 895 | ▲16 × 25 | 0.073 | 0.27 | 1350 |
| **330** | 331 | 12.5 × 25 | 0.12 | 0.45 | 875 | 12.5 × 40 | 0.071 | 0.30 | 1280 |
| | | | | | | ▲18 × 20 | 0.080 | 0.30 | 1300 |
| **390** | 391 | 18 × 15 | 0.12 | 0.50 | 1030 | 16 × 31.5 | 0.054 | 0.20 | 1650 |
| | | | | | | ▲18 × 25 | 0.057 | 0.21 | 1560 |
| **470** | 471 | 12.5 × 31.5 | 0.10 | 0.42 | 1010 | 16 × 35.5 | 0.045 | 0.17 | 1900 |
| | | ▲16 × 20 | 0.091 | 0.38 | 1130 | ▲18 × 31.5 | 0.047 | 0.17 | 1720 |
| **560** | 561 | 12.5 × 35.5 | 0.083 | 0.35 | 1140 | 16 × 40 | 0.040 | 0.15 | 2130 |
| | | ▲16 × 25 | 0.073 | 0.27 | 1350 | | | | |
| **680** | 681 | 12.5 × 40 | 0.071 | 0.30 | 1280 | 18 × 35.5 | 0.040 | 0.15 | 1890 |
| | | ▲18 × 20 | 0.080 | 0.30 | 1300 | | | | |
| **820** | 821 | 16 × 31.5 | 0.054 | 0.20 | 1650 | 18 × 40 | 0.036 | 0.13 | 2470 |
| | | ▲18 × 25 | 0.057 | 0.21 | 1560 | | | | |
| **1000** | 102 | 16 × 35.5 | 0.045 | 0.17 | 1900 | | | | |
| | | ▲18 × 31.5 | 0.047 | 0.17 | 1720 | | | | |
| **1200** | 122 | 16 × 40 | 0.040 | 0.15 | 2130 | | | | |
| | | ▲18 × 35.5 | 0.040 | 0.15 | 1890 | | | | |
| **1500** | 152 | 18 × 40 | 0.036 | 0.13 | 2470 | | | | |

▲ : In this case, 6 will be put at 12th digit of type numbering system.
● : In this case, 3 will be put at 12th digit of type numbering system.

Стандарт Электрон Связь

Мы молодая и активно развивающаяся компания в области поставок электронных компонентов. Мы поставляем электронные компоненты отечественного и импортного производства напрямую от производителей и с крупнейших складов мира.

Благодаря сотрудничеству с мировыми поставщиками мы осуществляем комплексные и плановые поставки широчайшего спектра электронных компонентов.

Собственная эффективная логистика и склад в обеспечивает надежную поставку продукции в точно указанные сроки по всей России.

Мы осуществляем техническую поддержку нашим клиентам и предпродажную проверку качества продукции. На все поставляемые продукты мы предоставляем гарантию .

Осуществляем поставки продукции под контролем ВП МО РФ на предприятия военно-промышленного комплекса России , а также работаем в рамках 275 ФЗ с открытием отдельных счетов в уполномоченном банке. Система менеджмента качества компании соответствует требованиям ГОСТ ISO 9001.

Минимальные сроки поставки, гибкие цены, неограниченный ассортимент и индивидуальный подход к клиентам являются основой для выстраивания долгосрочного и эффективного сотрудничества с предприятиями радиоэлектронной промышленности, предприятиями ВПК и научно-исследовательскими институтами России.

С нами вы становитесь еще успешнее!

**Наши контакты:**

**Телефон:** +7 812 627 14 35

**Электронная почта:** sales@st-electron.ru

**Адрес:** 198099, Санкт-Петербург,
Промышленная ул, дом № 19, литера Н,
помещение 100-Н Офис 331