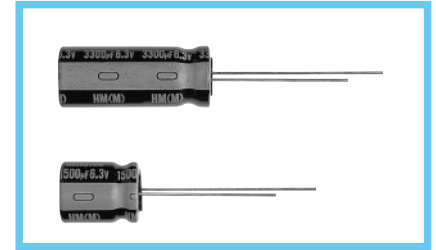


ALUMINUM ELECTROLYTIC CAPACITORS

HM Low Impedance series



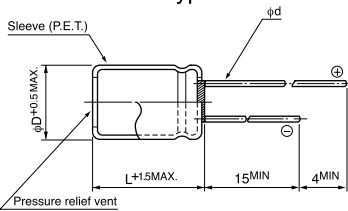
- Lower impedance than HD, HC series.
- Adapted to the RoHS directive (2002/95/EC).



Specifications

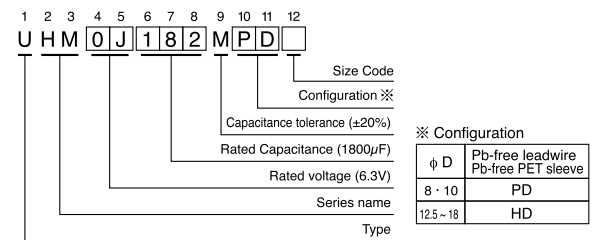
| Item | Performance Characteristics | | | | |
|------------------------------|---|---|------|------|------------|
| Category Temperature Range | -40 ~ +105°C | | | | |
| Rated Voltage Range | 6.3 ~ 16V | | | | |
| Rated Capacitance Range | 330 ~ 12000µF | | | | |
| Capacitance Tolerance | ±20% (120Hz, 20°C) | | | | |
| Leakage Current | After 2 minutes' application of rated voltage, leakage current is less than 0.03CV | | | | |
| tan δ | For capacitance of more than 1000µF, add 0.02 for every increase of 1000µF | | | | |
| | Rated voltage (V) | 6.3 | 10 | 16 | 120Hz 20°C |
| | tan δ (MAX.) | 0.22 | 0.19 | 0.16 | |
| Stability at Low Temperature | Rated voltage (V) | 6.3 | 10 | 16 | 120Hz |
| | Impedance ratio ZT / Z20 (MAX.) Z-40°C / Z+20°C | 3 | 3 | 3 | |
| Endurance | After an application of D.C. bias voltage plus the rated ripple current for 2000 hours at 105°C the peak voltage shall not exceed the rated D.C. voltage, capacitors meet the characteristic requirements listed below. | | | | |
| | Capacitance change | Within ±25% of initial value | | | |
| | tan δ | 200% or less of initial specified value | | | |
| | Leakage current | Initial specified value or less | | | |
| Marking | Printed with white color black sleeve. | | | | |

Radial Lead Type



| | (mm) | | | | |
|----|------|-----|------|-----|-----|
| φD | 8 | 10 | 12.5 | 16 | 18 |
| P | 3.5 | 5.0 | 5.0 | 7.5 | 7.5 |
| φd | 0.6 | 0.6 | 0.6 | 0.8 | 0.8 |

Type numbering system (Example : 6.3V 1800µF)



• Please refer to page 21 about the end seal configuration.

Standard ratings

| Cap. (µF) | Item Code | 6.3 (0J) | | | 10 (1A) | | | 16 (1C) | | |
|-----------|-----------|-----------------------|-----------------------------------|-------------------------------------|-----------------------|-----------------------------------|-------------------------------------|-----------------------|-----------------------------------|-------------------------------------|
| | | Case size φD × L (mm) | Impedance (mΩ) MAX. 20°C / 100kHz | Rated ripple (mArms) 105°C / 100kHz | Case size φD × L (mm) | Impedance (mΩ) MAX. 20°C / 100kHz | Rated ripple (mArms) 105°C / 100kHz | Case size φD × L (mm) | Impedance (mΩ) MAX. 20°C / 100kHz | Rated ripple (mArms) 105°C / 100kHz |
| 330 | 331 | | | | 8 × 11.5 | 30 | 1140 | 8 × 11.5 | 30 | 1140 |
| 470 | 471 | | | | 8 × 11.5 | 30 | 1140 | ▲ 10 × 12.5 | 25 | 1540 |
| 560 | 561 | 8 × 11.5 | 30 | 1140 | 8 × 11.5 | 30 | 1140 | 10 × 12.5 | 25 | 1540 |
| 680 | 681 | | | | ▲ 10 × 12.5 | 25 | 1540 | ▲ 8 × 15 | 28 | 1490 |
| | | | | | | | | ● 8 × 20 | 18 | 1870 |
| | | | | | | | | ○ 10 × 16 | 18 | 2000 |
| 820 | 821 | 8 × 11.5 | 30 | 1140 | 10 × 12.5 | 25 | 1540 | 10 × 16 | 18 | 2000 |
| | | 8 × 15 | 28 | 1490 | ▲ 8 × 15 | 28 | 1490 | ▲ 8 × 20 | 18 | 1870 |
| 1000 | 102 | ▲ 10 × 12.5 | 25 | 1540 | ● 10 × 16 | 18 | 2000 | ● 10 × 20 | 13 | 2550 |
| | | ● 8 × 11.5 | 30 | 1140 | ○ 8 × 20 | 18 | 1870 | | | |
| 1200 | 122 | 8 × 15 | 28 | 1490 | | | | | | |
| | | 10 × 12.5 | 25 | 1540 | 10 × 16 | 18 | 2000 | | | |
| 1500 | 152 | ▲ 8 × 20 | 16 | 1950 | ▲ 8 × 20 | 18 | 1870 | 10 × 20 | 13 | 2550 |
| | | ● 10 × 16 | 18 | 2000 | | | | | | |
| | | 10 × 16 | 19 | 2000 | | | | | | |
| 1800 | 182 | ▲ 8 × 20 | 16 | 1950 | 10 × 20 | 13 | 2550 | ▲ 12.5 × 20 | 11 | 2800 |
| | | 10 × 20 | 13 | 2550 | | | | | | |
| 2200 | 222 | ▲ 8 × 20 | 16 | 1950 | 10 × 25 | 12 | 2800 | | | |
| | | ● 10 × 16 | 18 | 2000 | | | | | | |
| 2700 | 272 | 10 × 20 | 13 | 2550 | 12.5 × 20 | 11 | 3000 | 12.5 × 25 | 10 | 2900 |
| | | 10 × 25 | 12 | 2800 | | | | | | |
| 3300 | 332 | ▲ 12.5 × 20 | 11 | 3000 | 12.5 × 25 | 10 | 2900 | 16 × 25 | 9 | 3070 |
| | | ○ 10 × 20 | 13 | 2550 | | | | | | |
| 5600 | 562 | 12.5 × 25 | 10 | 2900 | | | | 18 × 25 | 8 | 3250 |
| 6800 | 682 | | | | 16 × 25 | 9 | 3070 | | | |
| 8200 | 822 | 16 × 25 | 9 | 3070 | 18 × 25 | 8 | 3250 | | | |
| 12000 | 123 | 18 × 25 | 8 | 3250 | | | | | | |

Please refer to page 21, 22, 23 about the formed or taped product spec. Please refer to page 3 for the minimum order quantity.

- ▲ : 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.
- : In this case, [9] will be put at 12th digit of type numbering system.