## **ALUMINUM ELECTROLYTIC CAPACITORS**

## nichicon



| Item                                 | Performance Characteristics   |                 |      |                     |    |   |   |      |      |  |  |
|--------------------------------------|---|-----------------|------|---------------------|----|---|---|------|------|--|--|
| Category Temperature Range           | -40 to +85°C  |                 |      |                     |    |   |   |      |      |  |  |
| Rated Voltage Range                  | 6.3 to 50V  |                 |      |                     |    |   |   |      |      |  |  |
| Rated Capacitance Range              | 1 to 1000µF   |                 |      |                     |    |   |   |      |      |  |  |
| Capacitance Tolerance                | ±20% at 120Hz, 20°C   |                 |      |                     |    |   |   |      |      |  |  |
| Leakage Current                      | After 1 minute's application of rated voltage at 20°C, leakage current is not more than 0.03CV or 3 (µA), whichever is greater. |                 |      |                     |    |   |   |      |      |  |  |
|                                      | Measurement frequency : 120Hz at 20°C   |                 |      |                     |    |   |   |      |      |  |  |
| Tangent of loss angle (tan $\delta)$ | Rated voltage (V)   | 6.3             | 10   | 16                  |    | 25  |   | 35   | 50   |  |  |
|                                      | tan δ (MAX.)  | 0.24            | 0.20 | 0.16                |    | 0.16  |   | 0.14 | 0.12 |  |  |
|                                      | Measurement frequency : 120Hz   |                 |      |                     |    |   |   |      |      |  |  |
| Stability at Low Temperature         | Rated voltage (V)   |                 | 6.3  | 10                  | 16 | 2   | 5   | 35   | 50   |  |  |
|                                      | Impedance ratio   | Z-25°C / Z+20°C | 4    | 3                   | 2  | 2   | 2   | 2    | 2    |  |  |
|                                      | ZT / Z20 (MAX.)   | Z-40°C / Z+20°C | 8    | 6                   | 4  | 2   | 1   | 4    | 4    |  |  |
|                                      | The specifications listed at right shall be met when the  |                 |      |                     |    |   |   |      |      |  |  |
| Endurance                            | capacitors are restored to 20°C after the rated voltage<br>is applied for 1000 hours at 85°C with the polarity                  |                 |      | tan ô               |    | 150% or less than the initial specified value |   |      |      |  |  |
|                                      |   |                 |      | Leakage current Les |    | Less than o                                   | Less than or equal to the initial specified value |      |      |  |  |
|                                      |   |                 |      |                     |    |   |   |      |      |  |  |
| Shelf Life                           | 4.1 at 20°C, they shall meet the specified values for the endurance characteristics listed above.                               |                 |      |                     |    |   |   |      |      |  |  |
| Marking                              | Printed with black color letter on clear green sleeve.  |                 |      |                     |    |   |   |      |      |  |  |

## Radial Lead Type









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

## Dimensions

| Dimensions $\phi$ D×L (mm) |      |           |           |           |           |           |           |  |  |  |  |  |
|----------------------------|------|-----------|-----------|-----------|-----------|-----------|-----------|--|--|--|--|--|
|                            | V    | 6.3       | 10        | 16        | 25        | 35        | 50        |  |  |  |  |  |
| Cap.(µF)                   | Code | 0J        | 1A        | 1C        | 1E        | 1V        | 1H        |  |  |  |  |  |
| 1                          | 010  |           |           |           |           |           | 5×11      |  |  |  |  |  |
| 2.2                        | 2R2  |           |           |           |           |           | 5×11      |  |  |  |  |  |
| 3.3                        | 3R3  |           |           |           |           |           | 5 × 11    |  |  |  |  |  |
| 4.7                        | 4R7  |           |           |           | 5 × 11    | 5×11      | 6.3 × 11  |  |  |  |  |  |
| 10                         | 100  |           |           | 5 × 11    | 5 × 11    | 6.3 × 11  | 8 × 11.5  |  |  |  |  |  |
| 22                         | 220  |           | 5 × 11    | 6.3 × 11  | 6.3 × 11  | 8 × 11.5  | 10 × 12.5 |  |  |  |  |  |
| 33                         | 330  | 5×11      | 6.3 × 11  | 6.3 × 11  | 8 × 11.5  | 10 × 12.5 | 10 × 16   |  |  |  |  |  |
| 47                         | 470  | 6.3 × 11  | 6.3 × 11  | 8 × 11.5  | 10 × 12.5 | 10 × 12.5 | 10 × 20   |  |  |  |  |  |
| 100                        | 101  | 8 × 11.5  | 10 × 12.5 | 10 × 12.5 | 10 × 16   | 10 × 20   | 12.5 × 25 |  |  |  |  |  |
| 220                        | 221  | 10 × 12.5 | 10 × 16   | 10 × 20   | 12.5 × 25 | 12.5 × 25 | 16 × 25   |  |  |  |  |  |
| 330                        | 331  | 10 × 16   | 10 × 20   | 12.5 × 20 | 12.5 × 25 | 16 × 25   | 16 × 31.5 |  |  |  |  |  |
| 470                        | 471  | 10 × 20   | 12.5 × 20 | 12.5 × 25 | 16 × 25   | 16 × 25   |           |  |  |  |  |  |
| 1000                       | 102  | 12.5 × 25 | 16 × 25   | 16 × 25   | 16 × 31.5 |           |           |  |  |  |  |  |

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