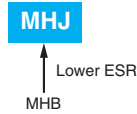


**New!**  
**Alchip™-MHJ Series**

- Endurance : 2,000 hours at 125°C
- Rated voltage range : 10 to 35V
- Nominal capacitance range : 47 to 470μF
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS Compliant

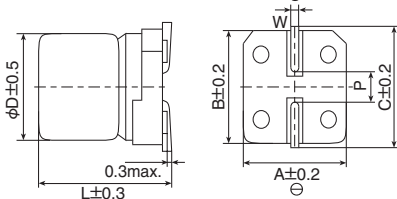


◆SPECIFICATIONS

| Items  | Characteristics   |                                      |      |      |      |               |
|--|---|--------------------------------------|------|------|------|---------------|
| Category   | -40 to +125°C   |                                      |      |      |      |               |
| Temperature Range                                      |   |                                      |      |      |      |               |
| Rated Voltage Range                                    | 10 to 35V <sub>dc</sub>   |                                      |      |      |      |               |
| Capacitance Tolerance                                  | ±20%(M) (20°C, 120Hz)   |                                      |      |      |      |               |
| Leakage Current  | I=0.01CV (at 20°C after 2 minutes)<br>Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V)   |                                      |      |      |      |               |
| Dissipation Factor (tanδ)                              | Rated voltage(V <sub>dc</sub> )   | 10V                                  | 16V  | 25V  | 35V  | (20°C, 120Hz) |
|  | tanδ (Max.)   | 0.30                                 | 0.23 | 0.18 | 0.16 |               |
| Low Temperature Characteristics (Max. impedance Ratio) | Rated voltage(V <sub>dc</sub> )   | 10V                                  | 16V  | 25V  | 35V  | (120Hz)       |
|  | Z(-25°C)/Z(+20°C)   | 3                                    | 2    | 2    | 2    |               |
|  | Z(-40°C)/Z(+20°C)   | 4                                    | 3    | 3    | 3    |               |
| Endurance  | The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 2,000 hours at 125°C.   |                                      |      |      |      |               |
|  | Capacitance change  | ≤±30% of the initial value           |      |      |      |               |
|  | D.F. (tanδ)   | ≤300% of the initial specified value |      |      |      |               |
|  | Leakage current   | ≤The initial specified value         |      |      |      |               |
|  | ESR (Ω max./100kHz)   |                                      | F80  | HA0  | JA0  |               |
| 20°C   |   | 3.5                                  | 0.60 | 0.40 |      |               |
|  | -40°C   | 40                                   | 4.5  | 3.5  |      |               |
| Shelf Life   | The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 125°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4. |                                      |      |      |      |               |
|  | Capacitance change  | ≤±30% of the initial value           |      |      |      |               |
|  | D.F. (tanδ)   | ≤300% of the initial specified value |      |      |      |               |
|  | Leakage current   | ≤The initial specified value         |      |      |      |               |

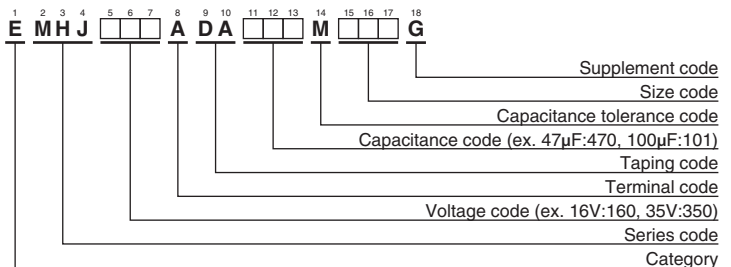
◆DIMENSIONS [mm]

●Terminal Code : A



| Size code | φD  | L    | A    | B    | C    | W          | P   |
|-----------|-----|------|------|------|------|------------|-----|
| F80       | 6.3 | 7.7  | 6.6  | 6.6  | 7.2  | 0.5 to 0.8 | 1.9 |
| HA0       | 8   | 10.0 | 8.3  | 8.3  | 9.0  | 0.7 to 1.1 | 3.1 |
| JA0       | 10  | 10.0 | 10.3 | 10.3 | 11.0 | 0.7 to 1.1 | 4.5 |

◆PART NUMBERING SYSTEM



Please refer to "Product code guide (surface mount type)"

◆MARKING

EX) 16V100μF



●Rated voltage symbol

| Rated voltage (V <sub>dc</sub> ) | Symbol |
|----------------------------------|--------|
| 10                               | A      |
| 16                               | C      |
| 25                               | E      |
| 35                               | V      |

◆STANDARD RATINGS

| WV(V <sub>dc</sub> ) | Cap(μF) | Size code | ESR (Ω max./100kHz) |       | Rated ripple current (mA rms/125°C, 100kHz) | Part No.           |
|----------------------|---------|-----------|---------------------|-------|---|--------------------|
|                      |         |           | 20°C                | -40°C |   |                    |
| 10                   | 220     | HA0       | 0.15                | 3.0   | 350   | EMHJ100ADA221MHA0G |
|                      | 330     | HA0       | 0.15                | 3.0   | 350   | EMHJ100ADA331MHA0G |
|                      | 330     | JA0       | 0.12                | 2.0   | 550   | EMHJ100ADA331MJA0G |
|                      | 470     | JA0       | 0.12                | 2.0   | 550   | EMHJ100ADA471MJA0G |
| 16                   | 100     | F80       | 0.45                | 5.0   | 220   | EMHJ160ADA101MF80G |
|                      | 100     | HA0       | 0.15                | 3.0   | 350   | EMHJ160ADA101MHA0G |
|                      | 220     | HA0       | 0.15                | 3.0   | 350   | EMHJ160ADA221MHA0G |
|                      | 330     | JA0       | 0.12                | 2.0   | 550   | EMHJ160ADA331MJA0G |
| 25                   | 100     | JA0       | 0.12                | 2.0   | 550   | EMHJ160ADA471MJA0G |
|                      | 100     | HA0       | 0.15                | 3.0   | 350   | EMHJ250ADA101MHA0G |
|                      | 220     | JA0       | 0.12                | 2.0   | 550   | EMHJ250ADA221MJA0G |
|                      | 330     | JA0       | 0.12                | 2.0   | 550   | EMHJ250ADA331MJA0G |
| 35                   | 47      | F80       | 0.45                | 5.0   | 220   | EMHJ350ADA470MF80G |
|                      | 47      | HA0       | 0.15                | 3.0   | 350   | EMHJ350ADA470MHA0G |
|                      | 100     | HA0       | 0.15                | 3.0   | 350   | EMHJ350ADA101MHA0G |
|                      | 220     | JA0       | 0.12                | 2.0   | 550   | EMHJ350ADA221MJA0G |