7mm 85°C MCMR Series

multicomp PRO

RoHS Compliant

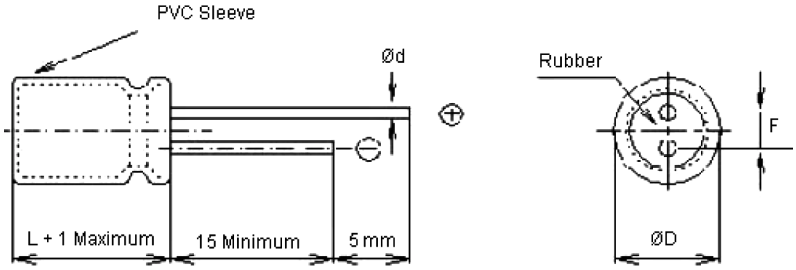
Features

- Developed short body length to 7mm, for the demand of smaller and thinner electronic equipment
- Most suitable for high-density electronic equipment, such as: automatic office machines, pocket calculators, car stereos and mini-audio sets, VCR, camera, CD-ROM, notebook.

Specifications

<table>
<tr><th>Item</th><th>Performance</th></tr>
<tr><td>Operating temperature range</td><td>-40°C to +85°C</td></tr>
<tr><td>Rated working voltage range</td><td>6.3V DC to 63V DC</td></tr>
<tr><td>Nominal capacitance range</td><td>0.1µF to 470µF</td></tr>
<tr><td>Capacitance tolerance</td><td>±20% (at +20°C, 120 Hz)</td></tr>
<tr><td>Leakage current</td><td>I = 0.01 C V or 3 (µA) after two minutes</td></tr>
<tr><td>Dissipation factor (tan δ)
(120 Hz / +20°C)</td><td>
<table>
<tr><td>Working voltage (V)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td></tr>
<tr><td>Maximum tan δ</td><td>0.24</td><td>0.2</td><td>0.16</td><td>0.14</td><td>0.12</td><td>0.1</td><td>0.08</td></tr>
</table>
</td></tr>
<tr><td>Characteristics at high and low temperature (stability at 120 Hz)</td><td>
<table>
<tr><td>Working voltage (V)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td></tr>
<tr><td>-25°C / +20°C</td><td>4</td><td>3</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td></tr>
<tr><td>-40°C / +20°C</td><td>8</td><td>6</td><td>4</td><td>4</td><td>3</td><td>3</td><td>3</td></tr>
</table>
</td></tr>
<tr><td>High temperature loading</td><td>After 1,000 hours application of DC rated working voltage at +85°C,
The capacitor shall meet the following limits :
Post test requirements at +20°C
<table>
<tr><td>Leakage current</td><td>£ the initial specified value</td></tr>
<tr><td>Capacitance change</td><td>£ ±20% of initial measured value</td></tr>
<tr><td>Dissipation factor (tan δ)</td><td>£ 200% of initial specified value</td></tr>
</table>
</td></tr>
<tr><td>Shelf life</td><td>After storage for 500 hours at +85°C with no voltage applied
Post test requirements at +20°C
same limits as high temperature loading</td></tr>
<tr><td>Solvent proof</td><td>This capacitor can withstand circuit-board cleaning within 5 minutes
dipped in Freon TE, TES at 40°C (ultrasonic also permitted)
or in the steam of these cleaners</td></tr>
</table>

Diagram of Dimensions



ØD (+0.5 Maximum)	3	4	5	6.3	8
F (±0.5)	1	1.5	2	2.5	3.5
Ød (±0.02)	0.4	0.45	0.45	0.45	0.5

Dimensions : Millimetres

Case Size Table ØD × L (mm)

W.V. (SV) / µF	6.3 (8)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)	63 (79)
0.1	-	-	-	-	R	4 × 7	4 × 7
0.22	-	-	-	-			
0.33	-	-	-	-			
0.47	-	-	-	-			
1	-	-	-	-			
2.2	-	-	-	-			
3.3	-	-	-	-			
4.7	-	-	-	-			5 × 7
10	-	-	R	4 × 7	4 × 7	5 × 7	6.3 × 7
22	-	R	4 × 7	5 × 7	5 × 7	6.3 × 7	-
33	R	4 × 7	5 × 7		6.3 × 7	8 × 7 (8 × 9)	-
47				6.3 × 7			-
100		5 × 7	6.3 × 7	8 × 7 (8 × 9)	8 × 7 (8 × 9)	-	-
220		6.3 × 7	8 × 7 (8 × 9)	-	-	-	-
330		8 × 7 (8 × 9)		-	-	-	-
470	8 × 7 (8 × 9)	8 × 9	8 × 9	-	-	-	-

All blank voltage on sleeve marking is the same voltage as “R” point to

Part Number Table

Description	Part Number
Capacitor, 33µF, 10V	MCMR10 V336M4X7
Capacitor, 47µF, 10V	MCMR10 V476M4X7
Capacitor, 100µF, 10V	MCMR10 V107M5X7

Description	Part Number
Capacitor, 220µF, 10V	MCMR10 V227M6.3X7
Capacitor, 330µF, 10V	MCMR10 V337M8X7
Capacitor, 470µF, 10V	MCMR10 V477M8X9

Description	Part Number
Capacitor, 22µF, 16V	MCMR16 V226M4X7
Capacitor, 33µF, 16V	MCMR16 V336M5X7
Capacitor, 47µF, 16V	MCMR16 V476M5X7
Capacitor, 100µF, 16V	MCMR16 V107M6.3X7
Capacitor, 220µF, 16V	MCMR16 V227M8X7
Capacitor, 330µF, 16V	MCMR16 V337M8X7
Capacitor, 470µF, 16V	MCMR16 V477M8X9
Capacitor, 10µF, 25V	MCMR25 V106M4X7
Capacitor, 22µF, 25V	MCMR25 V226M5X7
Capacitor, 33µF, 25V	MCMR25 V336M5X7
Capacitor, 47µF, 25V	MCMR25 V476M6.3X7
Capacitor, 100µF, 25V	MCMR25 V107M8X7
Capacitor, 10µF, 35V	MCMR35 V106M4X7
Capacitor, 22µF, 35V	MCMR35 V226M5X7
Capacitor, 33µF, 35V	MCMR35 V336M6.3X7
Capacitor, 47µF, 35V	MCMR35 V476M6.3X7
Capacitor, 100µF, 35V	MCMR35 V107M8X7
Capacitor, 0.1µF, 50V	MCMR50 V104M4X7
Capacitor, 0.22µF, 50V	MCMR50 V224M4X7

Description	Part Number
Capacitor, 0.33µF, 50V	MCMR50 V334M4X7
Capacitor, 0.47µF, 50V	MCMR50 V474M4X7
Capacitor, 1µF, 50V	MCMR50 V105M4X7
Capacitor, 2.2µF, 50V	MCMR50 V225M4X7
Capacitor, 3.3µF, 50V	MCMR50 V335M4X7
Capacitor, 4.7µF, 50V	MCMR50 V475M4X7
Capacitor, 10µF, 50 V	MCMR50 V106M5X7
Capacitor, 22µF, 50V	MCMR50 V226M5X7
Capacitor, 33µF, 50V	MCMR50 V336M8X7
Capacitor, 47µF, 50V	MCMR50 V476M8X7
Capacitor, 0.1µF, 63V	MCMR63 V104M4X7
Capacitor, 0.22µF, 63V	MCMR63 V224M4X7
Capacitor, 0.33µF, 63V	MCMR63 V334M4X7
Capacitor, 0.47µF, 63V	MCMR63 V474M4X7
Capacitor, 1µF, 63V	MCMR63 V105M4X7
Capacitor, 2.2µF, 63V	MCMR63 V225M4X7
Capacitor, 3.3µF, 63V	MCMR63 V335M4X7
Capacitor, 4.7µF, 63V	MCMR63 V475M5X7
Capacitor, 10µF, 63V	MCMR63 V106M6.3X7