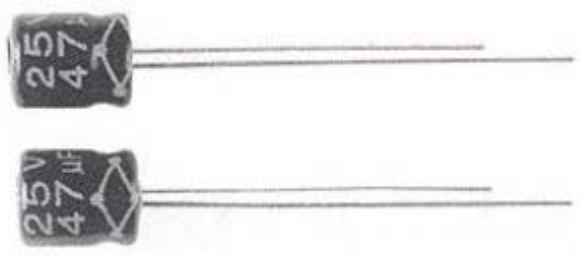
7mm 85°C MCMR Series



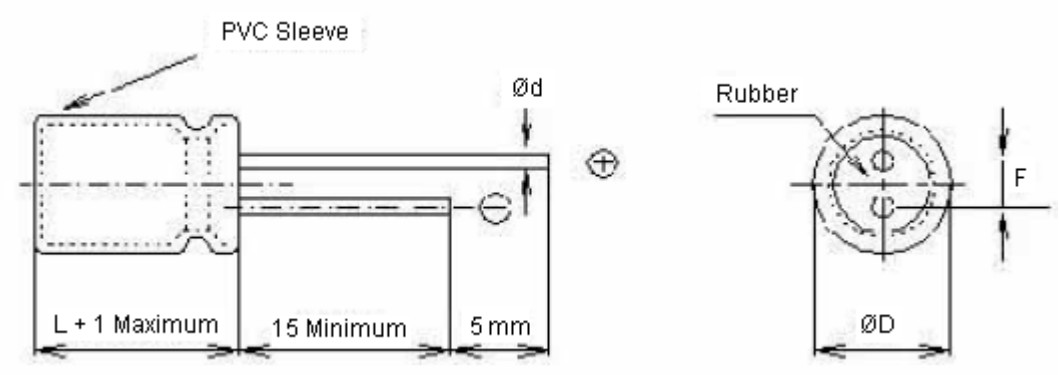
Features:

- Developed short body length to 7 m/m, 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>6.3 to 63 V dc</td></tr>
<tr><td>Nominal capacitance range</td><td>0.1 to 470 µF</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>Sol vent 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



Dimensions : Millimetres

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

Case Size Table ØD x 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 x 9)	8 × 9	8 × 9	-	-	-	-

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

7mm 85ºC MCMR Series

Part Number Table

Description	Part Number
CAPACITOR, 33 µF, 10 V	MCMR10 V336M4X7
CAPACITOR, 47 µF, 10 V	MCMR10 V476M4X7
CAPACITOR, 100 µF, 10 V	MCMR10 V107M5X7
CAPACITOR, 220 µF, 10 V	MCMR10 V227M6.3X7
CAPACITOR, 330 µF, 10 V	MCMR10 V337M8X7
CAPACITOR, 470 µF, 10 V	MCMR10 V477M8X9
CAPACITOR, 22 µF, 16 V	MCMR16 V226M4X7
CAPACITOR, 33 µF, 16 V	MCMR16 V336M5X7
CAPACITOR, 47 µF, 16 V	MCMR16 V476M5X7
CAPACITOR, 100 µF, 16 V	MCMR16 V107M6.3X7
CAPACITOR, 220 µF, 16 V	MCMR16 V227M8X7
CAPACITOR, 330 µF, 16 V	MCMR16 V337M8X7
CAPACITOR, 470 µF, 16 V	MCMR16 V477M8X9
CAPACITOR, 10 µF, 25 V	MCMR25 V106M4X7
CAPACITOR, 22 µF, 25 V	MCMR25 V226M5X7
CAPACITOR, 33 µF, 25 V	MCMR25 V336M5X7
CAPACITOR, 47 µF, 25 V	MCMR25 V476M6.3X7
CAPACITOR, 100 µF, 25 V	MCMR25 V107M8X7
CAPACITOR, 10 µF, 35 V	MCMR35 V106M4X7
CAPACITOR, 22UF, 35 V	MCMR35 V226M5X7
CAPACITOR, 33 µF, 35 V	MCMR35 V336M6.3X7
CAPACITOR, 47 µF, 35 V	MCMR35 V476M6.3X7
CAPACITOR, 100 µF, 35 V	MCMR35 V107M8X7
CAPACITOR, 0.1 µF, 50 V	MCMR50 V104M4X7
CAPACITOR, 0.22 µF, 50 V	MCMR50 V224M4X7
CAPACITOR, 0.33 µF, 50 V	MCMR50 V334M4X7
CAPACITOR, 0.47 µF, 50 V	MCMR50 V474M4X7
CAPACITOR, 1 µF, 50 V	MCMR50 V105M4X7
CAPACITOR, 2.2 µF, 50 V	MCMR50 V225M4X7
CAPACITOR, 3.3 µF, 50 V	MCMR50 V335M4X7
CAPACITOR, 4.7 µF, 50 V	MCMR50 V475M4X7
CAPACITOR, 10 µF, 50 V	MCMR50 V106M5X7
CAPACITOR, 22 µF, 50 V	MCMR50 V226M5X7
CAPACITOR, 33 µF, 50 V	MCMR50 V336M8X7
CAPACITOR, 47 µF, 50 V	MCMR50 V476M8X7
CAPACITOR, 0.1 µF, 63 V	MCMR63 V104M4X7
CAPACITOR, 0.22 µF, 63 V	MCMR63 V224M4X7
CAPACITOR, 0.33 µF, 63 V	MCMR63 V334M4X7
CAPACITOR, 0.47 µF, 63 V	MCMR63 V474M4X7
CAPACITOR, 1 µF, 63 V	MCMR63 V105M4X7
CAPACITOR, 2.2 µF, 63 V	MCMR63 V225M4X7
CAPACITOR, 3.3 µF, 63 V	MCMR63 V335M4X7
CAPACITOR, 4.7 µF, 63 V	MCMR63 V475M5X7
CAPACITOR, 10 µF, 63 V	MCMR63 V106M6.3X7