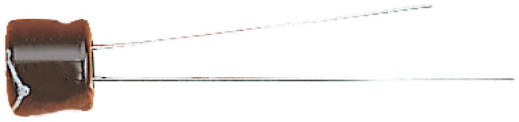
Ultra Miniature Radial Capacitors
MCUMHR Series

multicomp PRO



RoHS Compliant

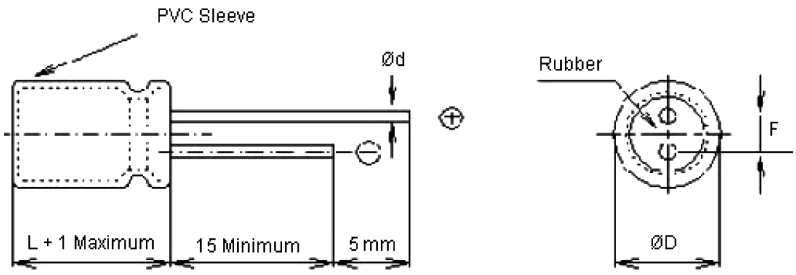
Features

- Ultra miniature radial electrolytic capacitors, Short body length to 5mm for the demand of smaller and thinner electronic equipment
- Suitable for high-density electronic equipment, such as: Automatic office machines, pocket calculators, car stereos and mini-audio sets, VCR, camera, CD-ROM, notebook etc

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 50V DC</td></tr>
<tr><td>Nominal capacitance range</td><td>1µF to 100µF</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 CV or 3 (µA) after two minutes</td></tr>
<tr><td>Dissipation factor (tan δ)
(120Hz / +20°C)</td><td>
<table>
<tr><td>Working voltage (V)</td><td>6.3</td><td>16</td><td>35</td><td>50</td></tr>
<tr><td>Maximum tan δ</td><td>0.24</td><td>0.16</td><td>0.12</td><td>0.1</td></tr>
</table>
</td></tr>
<tr><td>Characteristics at Low Temperature
(stability at 120Hz)</td><td>
<table>
<tr><td>Working voltage (V)</td><td>6.3</td><td>16</td><td>35</td><td>50</td></tr>
<tr><td>-25°C / +20°C</td><td>4</td><td>2</td><td>2</td><td>2</td></tr>
<tr><td>-40°C / +20°C</td><td>8</td><td>4</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 +105°C with no voltage applied
Post test requirements at +20°C. Same limits for high temperature loading</td></tr>
<tr><td>Solvent Proof</td><td>This capacitor can withstand circuit-board cleaning of 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)	4	5	6.3
F (±0.5)	1.5	2	2.5
Ød (±0.02)	0.45	0.45	0.45

Dimensions : Millimetres

Newark.com/multicomp-pro
Farnell.com/multicomp-pro
Element14.com/multicomp-pro

multicomp PRO

Case Size Table

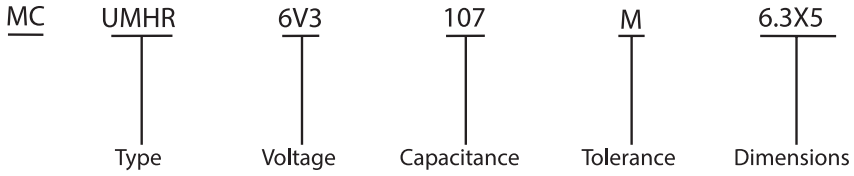
W.V. (SV) / μF	6.3 (8)	16 (20)	35 (44)	50 (63)
1	-	-	-	4 × 5
2.2	-	-	-	4 × 5
4.7	-	-	4 × 5	5 × 5
10	-	-	5 × 5	-
22	-	-	6.3 × 5	-
47	-	6.3 × 5	-	-
100	5 × 5	-	-	-

Dimensions : Millimetres

Specification Table

Capacitance (μF)	Voltage (V DC)	Ripple Current at 120 Hz, 105°C (mA)	Height	Diameter	Lead Diameter	Lead Pitch	Part Number
100	6.3	60	5	5	0.45	2	MCUMHR6V3107M6.3X5
47	16	50		6.3		2.5	MCUMHR16V476M6.3X5
4.7	35	15		4		1.5	MCUMHR35V475M4X5
10		25		5		2	MCUMHR35V106M5X5
22		42		6.3		2.5	MCUMHR35V226M6.3X5
1	50	6.2		4		1.5	MCUMHR50V105M4X5
2.2		11					MCUMHR50V225M4X5

Part Number Explanation



Voltage (V DC) : 6V3 = 6.3 V dc, 16V = 16 V dc, 35 = 35 V dc and 50 = 50 V dc

Capacitance code (μF) : First two digits are the base value and last digit which denotes the number of zeros at the end of the value Eg : 107 = 100,000,000μF
Eg : 476 = 47,000,000μF

Tolerance : M = ±20%

Dimensions : Diameter × Height