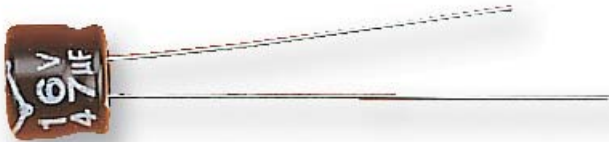


MCUMR Series

Ultra-Miniaturised



Features:

- Developed short body length to 5mm 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 etc.
- Ultra miniature radial electrolytic capacitors.

Electrical Specifications

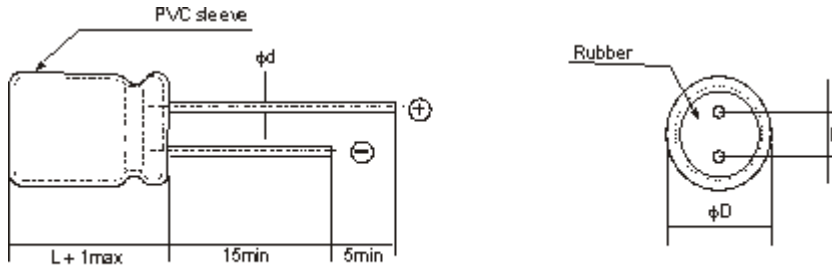
Item	Performance																		
Operating Temperature Range	-40°C to +85°C																		
Rated Working Voltage Range	4 to 50V dc																		
Nominal Capacitance Range	1.0 to 470µF																		
Capacitance Tolerance	±20% (at +20°C, 120Hz)																		
DC Leakage Current	I = 0.01CV or 3µA whichever is greater after two minutes																		
Dissipation Factor (tanδ) (120Hz/+20°C)	<table border="1"> <thead> <tr> <th>Working Voltage (V)</th> <th>6.3</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>tanδ (maximum)</td> <td>0.24</td> <td>0.18</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> </tr> </tbody> </table>	Working Voltage (V)	6.3	16	25	35	50	tanδ (maximum)	0.24	0.18	0.14	0.12	0.10						
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Characteristics at Low Temperature (Stability at 120Hz)	<table border="1"> <thead> <tr> <th>Working Voltage (V)</th> <th>6.3</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>-25°C/+20°C</td> <td>4</td> <td colspan="4">2</td> </tr> <tr> <td>-40°C/+20°C</td> <td>8</td> <td>4</td> <td colspan="3">3</td> </tr> </tbody> </table>	Working Voltage (V)	6.3	16	25	35	50	-25°C/+20°C	4	2				-40°C/+20°C	8	4	3		
	Working Voltage (V)	6.3	16	25	35	50													
	-25°C/+20°C	4	2																
-40°C/+20°C	8	4	3																
High Temperature Loading	After 1000 hours application of DC rated working voltage at +85°C. The capacitor shall meet the following limits: Post test requirements at +20°C.																		
	<table border="1"> <tbody> <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 (tanδ)</td> <td>≤ 200% of initial specified value</td> </tr> </tbody> </table>	Leakage current	≤ the initial specified value	Capacitance change	≤ ±20% of initial measured value	Dissipation factor (tanδ)	≤ 200% of initial specified value												
	Leakage current	≤ the initial specified value																	
	Capacitance change	≤ ±20% of initial measured value																	
Dissipation factor (tanδ)	≤ 200% of initial specified value																		
Shelf Life	After storage for 500 hours at +85°C with no voltage applied. Post test requirements at +20°C. Same limits for high temperature loading.																		
Solvent Proof	This capacitor can withstand circuit-board cleaning within 5 minute dipped in Freon TE, TES, at 40°C (ultrasonic also permitted) or in the steam of these cleaners.																		

MCUMR Series

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Diagram of Dimensions



D ϕ (+0.5Max)	4	5	6.3	8
F (± 0.5)	1.5	2.0	2.5	3.5
d ϕ (± 0.02)	0.45			0.5

Dimensions : Millimetres

Case Size Table

ϕ Diameter x Height

WV. (SV) μF	6.3 (8)	16 (20)	25 (32)	35 (44)	50 (63)
1	-	-	-	-	4 x 5
2.2	-	-	4 x 5	-	
3.3	-	-		4 x 5	5 x 5
4.7	-	-		5 x 5	
10	-	4 x 5	5 x 5	6.3 x 5	6.3 x 5
22	4 x 5	5 x 5	6.3 x 5	-	8 x 5
33		6.3 x 5	-	-	-
47		-	-	-	-
100	5 x 5	6.3 x 5	-	-	-
330	8 x 5	-	-	-	-

Dimensions : Millimetres



MCUMR Series

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Part Numbers

Capacitance (µF)	Working Voltage (V)	Ripple (mA) @ 120Hz 85°C	Dimensions		Lead Diameter	Lead Pitch	Part Number	
			Height	Diameter				
22	6.3	28	5	4	0.45	1.5	UMR6V3226M4X5	
33		37					UMR6V3336M4X5	
47		45		UMR6V3476M4X5				
100		70		2		UMR6V3107M5X5		
330		170		8		0.5	3.5	UMR6V3337M8X5
10	16	23		4	0.45	1.5	UMR16V106M4X5	
22		37					UMR16V226M4X5	
33		49				5	2	UMR16V336M4X5
47		58				6.3	2.5	UMR16V476M6.3X5
100		92						UMR16V107M6.3X5
2.2	25	8.4	4	0.45	1.5	UMR25V225M4X5		
3.3		10				UMR25V335M4X5		
4.7		16				UMR25V475M4X5		
10		27				UMR25V106M4X5		
22		42			5	2	UMR25V226M5X5	
33		52			6.3	2.5	UMR25V336M6.3X5	
3.3	35	14	4	0.45	1.5	UMR35V335M4X5		
4.7		18				UMR35V475M4X5		
10		29			5	2	UMR35V106M5X5	
22		46			6.3	2.5	UMR35V226M6.3X5	
1	50	28	4	0.45	1.5	UMR50V105M4X5		
2.2		13				UMR50V225M4X5		
3.3		17				UMR50V335M4X5		
4.7		20			5	2	UMR50V475M5X5	
10		33			6.3	2.5	UMR50V106M6.3X5	
22		52			8	0.5	3.5	UMR50V226M8X5

Dimensions : Millimetres

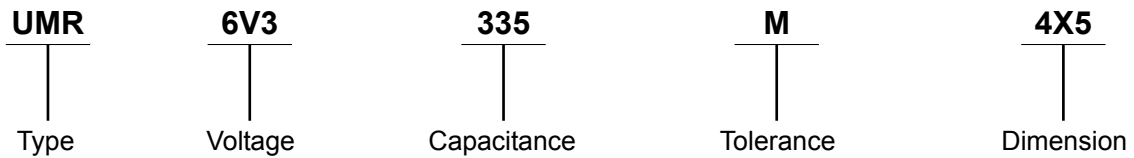


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Part Number Explanation:



Voltage (V dc)

: 6V3 = 6.3V dc, 16V = 16V dc, (25, 35 and 50 V dc).

Capacitance code (μF)

: First two digits are the base value and last digit represents the conversion factor.

Last digit 5 represents decimal point in base value,

In code 335 Capacitance is 3.3, similarly for 475 capacitance is 4.7.

Last digit 6 represents no change in base value,

In code 336, Capacitance value is 33.

Last digit 7 represents one zero is added to the base value,

In code 107, Capacitance value is 100, similarly for 337, capacitance value is 330.

Tolerance

: M = $\pm 20\%$.

Dimensions

: Diameter x Height.

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Notes:

International Sales Offices:

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