

## Aluminum Electrolytic Capacitors (Radial Lead Type)

Series: **M**  
 Type: **A (Radial Leads)**  
 Style: **04/JIS C 5141**



Standard

■ **Features**

- Lifetime: 85 °C 2000 h
- Smaller than series SU.

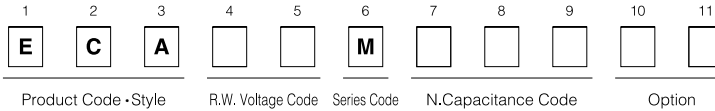
■ **Recommended Applications**

- AV (TV, Video, Audio), Office, Home appliance

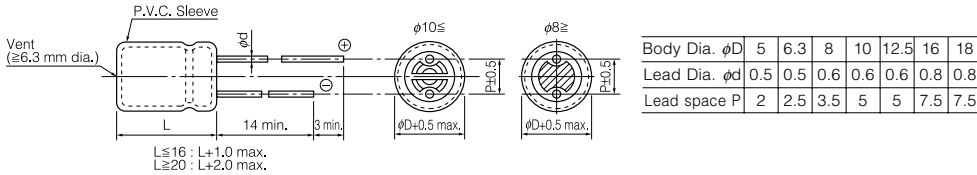
■ **Specifications**

Operating Temp. Range	-40 to +85 °C	-25 to +85 °C																																													
Rated W.V. Range	6.3 to 100 V. DC	160 to 450 V. DC																																													
Nominal Cap. Range	0.1 to 22000 µF	1.0 to 470 µF																																													
Capacitance Tolerance	±20 % (120 Hz/+20 °C)																																														
DC Leakage Current	I ≤ 0.03 CV or 4 (µA) after 1 minutes I ≤ 0.01 CV or 3 (µA) after 2 minutes (Whichever, greater)	I ≤ 0.06 CV+10 (µA) after 2 minutes																																													
Dissipation Factor	<table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th style="text-align: left;">W.V. (V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> <th>160</th> <th>200</th> <th>250</th> <th>350</th> <th>400</th> <th>450</th> </tr> </thead> <tbody> <tr> <td style="text-align: left;">D.F.</td> <td>0.28</td> <td>0.24</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.11</td> <td>0.10</td> <td>0.16</td> <td>0.18</td> <td>0.18</td> <td>0.20</td> <td>0.20</td> <td>0.20</td> </tr> </tbody> </table> <p style="font-size: x-small;">Add 0.02 per 1000 µF for products of 1000 µF or more. (120 Hz/+20 °C)</p>		W.V. (V)	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450	D.F.	0.28	0.24	0.20	0.16	0.14	0.12	0.11	0.10	0.16	0.18	0.18	0.20	0.20	0.20															
W.V. (V)	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450																																	
D.F.	0.28	0.24	0.20	0.16	0.14	0.12	0.11	0.10	0.16	0.18	0.18	0.20	0.20	0.20																																	
Characteristics at Low Temperature	<table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <thead> <tr> <th style="text-align: left;">W.V. (V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> <th>160</th> <th>200</th> <th>250</th> <th>350</th> <th>400</th> <th>450</th> </tr> </thead> <tbody> <tr> <td style="text-align: left;">Z (-25 °C)/ Z (+20 °C)</td> <td>5</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>3</td> <td>5</td> <td>6</td> <td>6</td> </tr> <tr> <td style="text-align: left;">Z (-40 °C)/ Z (+20 °C)</td> <td>12</td> <td>10</td> <td>8</td> <td>5</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> </tbody> </table> <p style="font-size: x-small;">1 Add 0.5 per 1000 µF for products of 1000 µF or more at -25 °C.                  2 Add 1.0 per 1000 µF for products of 1000 µF or more at -40 °C.                  (Impedance ratio at 120 Hz)</p>		W.V. (V)	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450	Z (-25 °C)/ Z (+20 °C)	5	4	3	2	2	2	2	2	2	2	3	5	6	6	Z (-40 °C)/ Z (+20 °C)	12	10	8	5	4	3	3	3	-	-	-	-	-	-
W.V. (V)	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450																																	
Z (-25 °C)/ Z (+20 °C)	5	4	3	2	2	2	2	2	2	2	3	5	6	6																																	
Z (-40 °C)/ Z (+20 °C)	12	10	8	5	4	3	3	3	-	-	-	-	-	-																																	
Endurance	<p>After applying rated working voltage for 2000 hours at +85 °C and then being stabilized at +20 °C, capacitor shall meet the following limits</p> <table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <tr> <td style="width: 50%;">Capacitance change</td> <td>±20 % of initial measured value</td> </tr> <tr> <td>D.F.</td> <td>≤ 150 % of initial specified value</td> </tr> <tr> <td>DC leakage current</td> <td>≤ Initial specified value</td> </tr> </table>		Capacitance change	±20 % of initial measured value	D.F.	≤ 150 % of initial specified value	DC leakage current	≤ Initial specified value																																							
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Shelf Life	<p>After storage for 1000 hours at +85 °C with no voltage applied and then being stabilized at +20 °C, capacitor shall meet the limits specified in "Endurance".</p>																																														

### ■ Explanation of Part Numbers



### ■ Dimensions in mm (not to scale)



### ■ Case size/Ripple current

φD×L (mm)/(mA) r.m.s. (120 Hz/+85 °C)

Cap. (μF)	W.V. (V.DC)	6.3 (0J)	10 (1A)	16 (1C)	25 (1E)	35 (1V)	50 (1H)	63 (1J)	100 (2A)
0.1 (0R1)							5 x11	1.3	
0.22 (R22)							5 x11	2.9	
0.33 (R33)							5 x11	4.4	
0.47 (R47)							5 x11	5	5 x11 10
1.0 (010)							5 x11	10	5 x11 20
2.2 (2R2)							5 x11	20	5 x11 30
3.3 (3R3)							5 x11	35	5 x11 40
4.7 (4R7)							5 x11	45	5 x11 50
10 (100)			5 x11	30			5 x11	65	5 x11 70
22 (220)			5 x11	75			5 x11	100	* 5 x11 105
33 (330)			5 x11	110			* 5 x11	110	6.3x11.2 130
47 (470)			5 x11	130		* 5 x11	130	6.3x11.2 130	* 6.3x11.2 160
100 (101)			* 5 x11	180	6.3x11.2 180	* 6.3x11.2 210	8 x11.5 250	* 8 x11.5 270	10 x16 350
220 (221)	* 5 x11	240	* 6.3x11.2	280		* 8 x11.5 350	10 x12.5 400	10 x16 450	* 12.5x20 550
330 (331)		* 6.3x11.2	330		* 8 x11.5 390	10 x12.5 440	10 x16 500	10 x20 550	* 12.5x25 700
470 (471)	* 6.3x11.2	380		* 8 x11.5 440	10 x12.5 480	10 x16 550	10 x20 650	12.5x20 750	16 x25 900
1000 (102)	* 8 x11.5	580	10 x12.5 630	10 x16 680	10 x20 850	12.5x20 900	* 12.5x25 1050	16 x25 1100	18 x35.5 1300
2200 (222)	10 x16	890	10 x20 920	12.5x20 1000	* 12.5x25 1200	16 x25 1250	16 x31.5 1300	18 x35.5 1400	
3300 (332)	10 x20	1020	12.5x20 1090	* 12.5x25 1200	16 x25 1300	16 x31.5 1400	18 x35.5 1500		
4700 (472)	* 12.5x20	1170	* 12.5x25 1200	16 x25 1360	16 x31.5 1500	18 x35.5 1600			
6800 (682)	* 12.5x25	1270	16 x25 1400	16 x31.5 1600	18 x35.5 1750				
10000 (103)	16 x25	1450	16 x31.5 1600	18 x35.5 1800					
15000 (153)	16 x31.5	1700	18 x35.5 1850						
22000 (223)	18 x35.5	1900							Case size Ripple current

Cap. (μF)	W.V. (V.DC)	160 (2C)	200 (2D)	250 (2E)	350 (2V)	400 (2G)	450 (2W)
1.0		6.3x11.2 36	6.3x11.2 34	6.3x11.2 34	6.3x11.2 32	* 6.3x11.2 32	* 8 x11.5 37
2.2		6.3x11.2 53	6.3x11.2 50	* 6.3x11.2 50	* 8 x11.5 55	* 8 x11.5 50	10 x12.5 44
3.3		6.3x11.2 66	* 6.3x11.2 62	* 8 x11.5 72	* 8 x11.5 60	10 x12.5 54	10 x16 60
4.7		* 6.3x11.2 78	* 8 x11.5 86	* 8 x11.5 86	10 x12.5 65	10 x16 72	10 x20 79
10		10 x12.5 105	10 x12.5 100	10 x16 110	10 x20 115	10 x20 115	12.5x20 130
22		10 x16 175	10 x20 180	10 x20 180	12.5x20 195	* 12.5x25 215	16 x25 210
33		10 x20 235	10 x20 220	12.5x20 250	16 x25 300	16 x25 275	16 x31.5 285
47		12.5x20 320	12.5x20 300	* 12.5x25 330	16 x25 325	16 x31.5 350	
100		* 12.5x25 515	16 x25 475	16 x31.5 530	18 x31.5 535	18 x40 600	
220		16 x31.5 830	18 x31.5 835	18 x40 930			
330		18 x31.5 1090	18 x40 1140				
470		18 x40 1440					Case size Ripple current

( ) shows W.V. and capacitance code.

\*Lead spacing is narrower than series SU because of miniaturization.

### ■ Standard Products

W.V.	Cap. (±20%)	Case size		Specification		Lead Length				Part No.	Min. Packaging Q'ty	
		Dia.	Length	Ripple current (120Hz +85°C) (mA)	D.F.	Lead Dia.	Lead Space				Straight Leads	Taping
(V)	(μF)	(mm)	(mm)	(mA)		(mm)	Straight (mm)	Taping *B (mm)	Taping *I (mm)		(pcs)	(pcs)
6.3	220	5	11	240	0.28	0.5	2.0	5.0	2.5	ECA0JM221( )	200	2000
	470	6.3	11.2	380	0.28	0.5	2.5	5.0	2.5	ECA0JM471( )	200	2000
	1000	8	11.5	580	0.28	0.6	3.5	5.0		ECA0JM102( )	200	1000
	2200	10	16	890	0.30	0.6	5.0	5.0		ECA0JM222( )	200	500
	3300	10	20	1020	0.32	0.6	5.0	5.0		ECA0JM332( )	200	500
	4700	12.5	20	1170	0.34	0.6	5.0	5.0		ECA0JM472( )	200	500
	6800	12.5	25	1270	0.38	0.6	5.0	5.0		ECA0JM682( )	200	500
	10000	16	25	1450	0.46	0.8	7.5	7.5		ECA0JM103( )	100	250
	15000	16	31.5	1700	0.56	0.8	7.5			ECA0JM153	100	
	22000	18	35.5	1900	0.70	0.8	7.5			ECA0JM223	50	
10	330	6.3	11.2	330	0.24	0.5	2.5	5.0	2.5	ECA1AM331( )	200	2000
	1000	10	12.5	630	0.24	0.6	5.0	5.0		ECA1AM102( )	200	500
	2200	10	20	920	0.26	0.6	5.0	5.0		ECA1AM222( )	200	500
	3300	12.5	20	1090	0.28	0.6	5.0	5.0		ECA1AM332( )	200	500
	4700	12.5	25	1200	0.30	0.6	5.0	5.0		ECA1AM472( )	200	500
	6800	16	25	1400	0.34	0.8	7.5	7.5		ECA1AM682( )	100	250
	10000	16	31.5	1600	0.42	0.8	7.5			ECA1AM103	100	
	15000	18	35.5	1850	0.52	0.8	7.5			ECA1AM153	50	
16	10	5	11	30	0.20	0.5	2.0	5.0	2.5	ECA1CM100( )	200	2000
	22	5	11	75	0.20	0.5	2.0	5.0	2.5	ECA1CM220( )	200	2000
	33	5	11	110	0.20	0.5	2.0	5.0	2.5	ECA1CM330( )	200	2000
	47	5	11	130	0.20	0.5	2.0	5.0	2.5	ECA1CM470( )	200	2000
	100	5	11	180	0.20	0.5	2.0	5.0	2.5	ECA1CM101( )	200	2000
	220	6.3	11.2	280	0.20	0.5	2.5	5.0	2.5	ECA1CM221( )	200	2000
	470	8	11.5	440	0.20	0.6	3.5	5.0		ECA1CM471( )	200	1000
	1000	10	16	680	0.20	0.6	5.0	5.0		ECA1CM102( )	200	500
	2200	12.5	20	1000	0.22	0.6	5.0	5.0		ECA1CM222( )	200	500
	3300	12.5	25	1200	0.24	0.6	5.0	5.0		ECA1CM332( )	200	500
	4700	16	25	1360	0.26	0.8	7.5	7.5		ECA1CM472( )	100	250
	6800	16	31.5	1600	0.30	0.8	7.5			ECA1CM682	100	
10000	18	35.5	1800	0.38	0.8	7.5			ECA1CM103	50		
25	100	6.3	11.2	180	0.16	0.5	2.5	5.0	2.5	ECA1EM101( )	200	2000
	330	8	11.5	390	0.16	0.6	3.5	5.0		ECA1EM331( )	200	1000
	470	10	12.5	480	0.16	0.6	5.0	5.0		ECA1EM471( )	200	500
	1000	10	20	850	0.16	0.6	5.0	5.0		ECA1EM102( )	200	500
	2200	12.5	25	1200	0.18	0.6	5.0	5.0		ECA1EM222( )	200	500
	3300	16	25	1300	0.20	0.8	7.5	7.5		ECA1EM332( )	100	250
	4700	16	31.5	1500	0.22	0.8	7.5			ECA1EM472	100	
	6800	18	35.5	1750	0.26	0.8	7.5			ECA1EM682	50	
35	47	5	11	130	0.14	0.5	2.0	5.0	2.5	ECA1VM470( )	200	2000
	100	6.3	11.2	210	0.14	0.5	2.5	5.0	2.5	ECA1VM101( )	200	2000
	220	8	11.5	350	0.14	0.6	3.5	5.0		ECA1VM221( )	200	1000

When requesting taped product, please put the letter "B" or "I" between the "( )". Lead wire pitch B=5mm, 7.5mm, I=2.5mm.

The taping dimensions are explained on p.25 of our Catalog. Please use it as a reference guide.

High temperature Load Life test : 85°C 2000h

### ■ Standard Products

W.V.	Cap. (±20%)  (μF)	Case size		Specification		Lead Length				Part No.	Min. Packaging Qty	
		Dia.	Length	Ripple current (120Hz) (+85°C) (mA)	D.F.	Lead Dia.	Lead Space		Straight Leads		Taping	
							Straight	Taping				Taping
(V)	(μF)	(mm)	(mm)	(mA)		(mm)	(mm)	*B	*i	(pcs)	(pcs)	
35	330	10	12.5	440	0.14	0.6	5.0	5.0		ECA1VM331( )	200	500
	470	10	16	550	0.14	0.6	5.0	5.0		ECA1VM471( )	200	500
	1000	12.5	20	900	0.14	0.6	5.0	5.0		ECA1VM102( )	200	500
	2200	16	25	1250	0.16	0.8	7.5	7.5		ECA1VM222( )	100	250
	3300	16	31.5	1400	0.18	0.8	7.5			ECA1VM332	100	
	4700	18	35.5	1600	0.20	0.8	7.5			ECA1VM472	50	
50	0.10	5	11	1.3	0.12	0.5	2.0	5.0	2.5	ECA1HM0R1( )	200	2000
	0.22	5	11	2.9	0.12	0.5	2.0	5.0	2.5	ECA1HMR22( )	200	2000
	0.33	5	11	4.4	0.12	0.5	2.0	5.0	2.5	ECA1HMR33( )	200	2000
	0.47	5	11	5	0.12	0.5	2.0	5.0	2.5	ECA1HMR47( )	200	2000
	1	5	11	10	0.12	0.5	2.0	5.0	2.5	ECA1HM010( )	200	2000
	2.2	5	11	20	0.12	0.5	2.0	5.0	2.5	ECA1HM2R2( )	200	2000
	3.3	5	11	35	0.12	0.5	2.0	5.0	2.5	ECA1HM3R3( )	200	2000
	4.7	5	11	45	0.12	0.5	2.0	5.0	2.5	ECA1HM4R7( )	200	2000
	10	5	11	65	0.12	0.5	2.0	5.0	2.5	ECA1HM100( )	200	2000
	22	5	11	100	0.12	0.5	2.0	5.0	2.5	ECA1HM220( )	200	2000
	33	5	11	110	0.12	0.5	2.0	5.0	2.5	ECA1HM330( )	200	2000
	47	6.3	11.2	130	0.12	0.5	2.5	5.0	2.5	ECA1HM470( )	200	2000
	100	8	11.5	250	0.12	0.6	3.5	5.0		ECA1HM101( )	200	1000
	220	10	12.5	400	0.12	0.6	5.0	5.0		ECA1HM221( )	200	500
	330	10	16	500	0.12	0.6	5.0	5.0		ECA1HM331( )	200	500
470	10	20	650	0.12	0.6	5.0	5.0		ECA1HM471( )	200	500	
1000	12.5	25	1050	0.12	0.6	5.0	5.0		ECA1HM102( )	200	500	
2200	16	31.5	1250	0.14	0.8	7.5			ECA1HM222	100		
3300	18	35.5	1300	0.16	0.8	7.5			ECA1HM332	50		
63	10	5	11	70	0.11	0.5	2.0	5.0	2.5	ECA1JM100( )	200	2000
	22	5	11	105	0.11	0.5	2.0	5.0	2.5	ECA1JM220( )	200	2000
	33	6.3	11.2	130	0.11	0.5	2.5	5.0	2.5	ECA1JM330( )	200	2000
	47	6.3	11.2	160	0.11	0.5	2.5	5.0	2.5	ECA1JM470( )	200	2000
	100	8	11.5	270	0.11	0.6	3.5	5.0		ECA1JM101( )	200	1000
	220	10	16	450	0.11	0.6	5.0	5.0		ECA1JM221( )	200	500
	330	10	20	550	0.11	0.6	5.0	5.0		ECA1JM331( )	200	500
	470	12.5	20	750	0.11	0.6	5.0	5.0		ECA1JM471( )	200	500
	1000	16	25	1100	0.11	0.8	7.5	7.5		ECA1JM102( )	100	250
2200	18	35.5	1400	0.13	0.8	7.5			ECA1JM222	50		
100	0.47	5	11	10	0.10	0.5	2.0	5.0	2.5	ECA2AMR47( )	200	2000
	1.0	5	11	20	0.10	0.5	2.0	5.0	2.5	ECA2AM010( )	200	2000
	2.2	5	11	30	0.10	0.5	2.0	5.0	2.5	ECA2AM2R2( )	200	2000
	3.3	5	11	40	0.10	0.5	2.0	5.0	2.5	ECA2AM3R3( )	200	2000
	4.7	5	11	50	0.10	0.5	2.0	5.0	2.5	ECA2AM4R7( )	200	2000
	10	5	11	70	0.10	0.5	2.0	5.0	2.5	ECA2AM100( )	200	2000
	22	6.3	11.2	115	0.10	0.5	2.5	5.0	2.5	ECA2AM220( )	200	2000

When requesting taped product, please put the letter "B" or "i" between the "( )". Lead wire pitch B=5mm, 7.5mm, i=2.5mm.

The taping dimensions are explained on p of our Catalog. Please use it as a reference guide.

High temperature Load Life test : 85°C 2000h

### ■ Standard Products

W.V. (V)	Cap. ( $\pm 20\%$ ) ( $\mu\text{F}$ )	Case size		Specification		Lead Length				Part No.	Min. Packaging Qty	
		Dia. (mm)	Length (mm)	Ripple current (120Hz) (+85°C) (mA)	D.F.	Lead Dia. (mm)	Lead Space				Straight Leads (pcs)	Taping (pcs)
							Straight (mm)	Taping *B (mm)	Taping *I (mm)			
100	33	8	11.5	145	0.10	0.6	3.5	5.0		ECA2AM330( )	200	1000
	47	8	11.5	180	0.10	0.6	3.5	5.0		ECA2AM470( )	200	1000
	100	10	16	350	0.10	0.6	5.0	5.0		ECA2AM101( )	200	500
	220	12.5	20	550	0.10	0.6	5.0	5.0		ECA2AM221( )	200	500
	330	12.5	25	700	0.10	0.6	5.0	5.0		ECA2AM331( )	200	500
	470	16	25	900	0.10	0.8	7.5	7.5		ECA2AM471( )	100	250
	1000	18	35.5	1300	0.10	0.8	7.5			ECA2AM102	50	
160	1	6.3	11.2	36	0.16	0.5	2.5	5.0	2.5	ECA2CM010( )	200	2000
	2.2	6.3	11.2	53	0.16	0.5	2.5	5.0	2.5	ECA2CM2R2( )	200	2000
	3.3	6.3	11.2	66	0.16	0.5	2.5	5.0	2.5	ECA2CM3R3( )	200	2000
	4.7	6.3	11.2	78	0.16	0.5	2.5	5.0	2.5	ECA2CM4R7( )	200	2000
	10	10	12.5	105	0.16	0.6	5.0	5.0		ECA2CM100( )	200	500
	22	10	16	175	0.16	0.6	5.0	5.0		ECA2CM220( )	200	500
	33	10	20	235	0.16	0.6	5.0	5.0		ECA2CM330( )	200	500
	47	12.5	20	320	0.16	0.6	5.0	5.0		ECA2CM470( )	200	500
	100	12.5	25	515	0.16	0.6	5.0	5.0		ECA2CM101( )	200	500
	220	16	31.5	830	0.16	0.8	7.5			ECA2CM221	100	
330	18	31.5	1090	0.16	0.8	7.5			ECA2CM331	50		
470	18	40	1440	0.16	0.8	7.5			ECA2CM471	50		
200	1	6.3	11.2	34	0.18	0.5	2.5	5.0	2.5	ECA2DM010( )	200	2000
	2.2	6.3	11.2	50	0.18	0.5	2.5	5.0	2.5	ECA2DM2R2( )	200	2000
	3.3	6.3	11.2	62	0.18	0.5	2.5	5.0	2.5	ECA2DM3R3( )	200	2000
	4.7	8	11.5	86	0.18	0.6	3.5	5.0		ECA2DM4R7( )	200	1000
	10	10	12.5	100	0.18	0.6	5.0	5.0		ECA2DM100( )	200	500
	22	10	20	180	0.18	0.6	5.0	5.0		ECA2DM220( )	200	500
	33	10	20	220	0.18	0.6	5.0	5.0		ECA2DM330( )	200	500
	47	12.5	20	300	0.18	0.6	5.0	5.0		ECA2DM470( )	200	500
	100	16	25	475	0.18	0.8	7.5	7.5		ECA2DM101( )	100	250
	220	18	31.5	835	0.18	0.8	7.5			ECA2DM221	50	
330	18	40	1140	0.18	0.8	7.5			ECA2DM331	50		
250	1	6.3	11.2	34	0.18	0.5	2.5	5.0	2.5	ECA2EM010( )	200	2000
	2.2	6.3	11.2	50	0.18	0.5	2.5	5.0	2.5	ECA2EM2R2( )	200	2000
	3.3	8	11.5	72	0.18	0.6	3.5	5.0		ECA2EM3R3( )	200	1000
	4.7	8	11.5	86	0.18	0.6	3.5	5.0		ECA2EM4R7( )	200	1000
	10	10	16	110	0.18	0.6	5.0	5.0		ECA2EM100( )	200	500
	22	10	20	180	0.18	0.6	5.0	5.0		ECA2EM220( )	200	500
	33	12.5	20	250	0.18	0.6	5.0	5.0		ECA2EM330( )	200	500
	47	12.5	25	330	0.18	0.6	5.0	5.0		ECA2EM470( )	200	500
	100	16	31.5	530	0.18	0.8	7.5			ECA2EM101	100	
220	18	40	930	0.18	0.8	7.5			ECA2EM221	50		
350	1	6.3	11.2	32	0.20	0.5	2.5	5.0	2.5	ECA2VM010( )	200	2000
	2.2	8	11.5	55	0.20	0.6	3.5	5.0		ECA2VM2R2( )	200	1000

When requesting taped product, please put the letter "B" or "I" between the "( )". Lead wire pitch B=5mm, 7.5mm, I=2.5mm.

The taping dimensions are explained on page 4 of our Catalog. Please use it as a reference guide.

High temperature Load Life test : 85°C 2000h

### ■ Standard Products

W.V.	Cap. (±20%)  (μF)	Case size		Specification		Lead Length				Part No.	Min. Packaging Qty	
		Dia.	Length	Ripple current (120Hz) (+85°C) (mA)	D.F.	Lead Dia. (mm)	Lead Space				Straight Leads (pcs)	Taping (pcs)
							Straight (mm)	Taping +B (mm)	Taping *i (mm)			
350	3.3	8	11.5	60	0.20	0.6	3.5	5.0		ECA2VM3R3( )	200	1000
	4.7	10	12.5	65	0.20	0.6	5.0	5.0		ECA2VM4R7( )	200	500
	10	10	20	115	0.20	0.6	5.0	5.0		ECA2VM100( )	200	500
	22	12.5	20	195	0.20	0.6	5.0	5.0		ECA2VM220( )	200	500
	33	16	25	300	0.20	0.8	7.5	7.5		ECA2VM330( )	100	250
	47	16	25	325	0.20	0.8	7.5	7.5		ECA2VM470( )	100	250
	100	18	31.5	535	0.20	0.8	7.5			ECA2VM101	50	
400	1	6.3	11.2	32	0.20	0.5	2.5	5.0	2.5	ECA2GM010( )	200	2000
	2.2	8.0	11.5	50	0.20	0.6	3.5	5.0		ECA2GM2R2( )	200	1000
	3.3	10	12.5	54	0.20	0.6	5.0	5.0		ECA2GM3R3( )	200	500
	4.7	10	16	72	0.20	0.6	5.0	5.0		ECA2GM4R7( )	200	500
	10	10	20	115	0.20	0.6	5.0	5.0		ECA2GM100( )	200	500
	22	12.5	25	215	0.20	0.6	5.0	5.0		ECA2GM220( )	200	500
	33	16	25	275	0.20	0.8	7.5	7.5		ECA2GM330( )	100	250
	47	16	31.5	350	0.20	0.8	7.5			ECA2GM470	100	
450	100	18	40	600	0.20	0.8	7.5			ECA2GM101	50	
	1	8	11.5	37	0.20	0.6	3.5	5.0		ECA2WM010( )	200	1000
	2.2	10	12.5	44	0.20	0.6	5.0	5.0		ECA2WM2R2( )	200	500
	3.3	10	16.0	60	0.20	0.6	5.0	5.0		ECA2WM3R3( )	200	500
	4.7	10	20	79	0.20	0.6	5.0	5.0		ECA2WM4R7( )	200	500
	10	12.5	20	130	0.20	0.6	5.0	5.0		ECA2WM100( )	200	500
	22	16	25	210	0.20	0.8	7.5	7.5		ECA2WM220( )	100	250
33	16	31.5	285	0.20	0.8	7.5			ECA2WM330	100		

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The taping dimensions are explained on p. of our Catalog. Please use it as a reference guide.

High temperature Load Life test : 85°C 2000h

\*not same as SMO page.