

# EA - 17 SERIES

## Wide Temperature Range

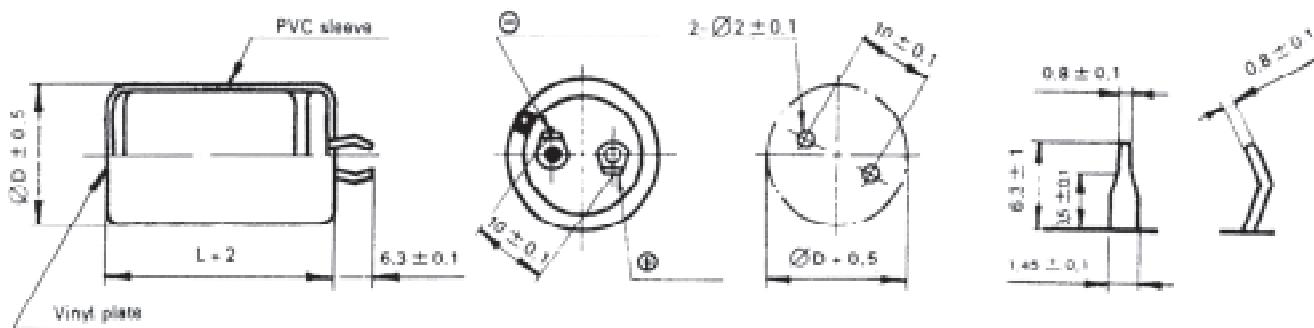
\*Standard series for General Purpose

\* Load life of 2000 hours at 85 °C

\* Snap-in terminal series

Item	Characteristics																															
Operating temperature range	- 40 $\div$ + 85 °C																															
Rated working voltage range Ur	160 $\div$ 450 VDC																															
Nominal capacitance range Cn	100 $\div$ 2200 $\mu$ F /at 20 °C, 120 Hz/																															
Capacitance tolerance	$\pm$ 20 %																															
Leakage current max.	0.02 CnUr + 15 $\mu$ A /after 5 min/																															
Dissipation factor max.	<table border="1"> <tr> <td>Rated voltage (VDC)</td> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>385</td> <td>400</td> <td>450</td> </tr> <tr> <td>Dissipation factor</td> <td>0.15</td> <td>0.15</td> <td>0.15</td> <td>0.17</td> <td>0.20</td> <td>0.20</td> <td>0.20</td> </tr> </table>								Rated voltage (VDC)	160	200	250	350	385	400	450	Dissipation factor	0.15	0.15	0.15	0.17	0.20	0.20	0.20								
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Dissipation factor	0.15	0.15	0.15	0.17	0.20	0.20	0.20																									
Low temperature characteristics (impedance ratio at 100 Hz)	<table border="1"> <tr> <td>VDC</td> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>385</td> <td>400</td> <td>450</td> </tr> <tr> <td>Z - 25°C/Z + 20°C</td> <td>6</td> <td>6</td> <td>6</td> <td>8</td> <td>8</td> <td>8</td> <td>8</td> </tr> <tr> <td>Z - 40°C/Z + 20°C</td> <td>8</td> <td>8</td> <td>8</td> <td>10</td> <td>12</td> <td>12</td> <td>12</td> </tr> </table>								VDC	160	200	250	350	385	400	450	Z - 25°C/Z + 20°C	6	6	6	8	8	8	8	Z - 40°C/Z + 20°C	8	8	8	10	12	12	12
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Load life (after application of the rated voltage for 2000 hours at 85°C)	<table border="1"> <tr> <td>Leakage current</td> <td colspan="7">Less than specified value</td></tr> <tr> <td>Capacitance change</td> <td colspan="7"><math>\pm</math> 20%</td></tr> <tr> <td><math>\text{tg}\delta</math></td> <td colspan="7">Less than 200% specified value</td></tr> </table>								Leakage current	Less than specified value							Capacitance change	$\pm$ 20%							$\text{tg}\delta$	Less than 200% specified value						
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Shelf life (at 85°C)	After 1000 hours no load test, leakage current, capacitance and $\text{tg}\delta$ are the same as load life values.																															

Terminal



\* PERMISSIBLE RIPPLE CURRENT MULTIPLIERS

Frequency	50Hz	120Hz	300Hz	1kHz	10kHz
Coefficient	0.85	1.00	1.08	1.25	1.35

Temp. °C	40	60	70	85
Coefficient	2.0	1.5	1.3	1.0

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\*DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT A(rms) at 120 Hz, 85°C & R<sub>ESR</sub> & Z<sub>MAX</sub>

Capacitance [ μF ]	Working voltage [ V ]	Dimensions φDxL [ mm ]	R <sub>ESR</sub> max [ Ω ] 120Hz 20°C	R <sub>ESR</sub> typ. [ Ω ] 120Hz 20°C	Z max [ Ω ] 10kHz 20°C	Max Ripple Current A[rms]
330	160	25x26	0.579	0.295	0.303	1.6
470		25x32	0.406	0.205	0.214	1.9
680		25x42	0.281	0.150	0.148	2.3
680		30x36	0.281	0.150	0.148	2.2
1000		30x42	0.191	0.099	0.105	2.8
1500		30x52	0.127	0.076	0.080	3.0
1500		35x42	0.127	0.076	0.080	3.0
2200		35x52	0.085	0.065	0.048	3.6
220	200	25x26	0.868	0.455	0.460	0.9
330		25x36	0.579	0.295	0.303	1.2
470		25x42	0.406	0.205	0.214	1.6
680		30x36	0.281	0.150	0.148	2.0
1000		30x52	0.191	0.099	0.105	2.5
1000		35x42	0.191	0.099	0.105	2.5
1500		35x52	0.127	0.076	0.080	3.0
2200		35x57	0.085	0.065	0.048	3.6
150	250	25x26	1.273	0.640	0.670	0.8
220		25x32	0.868	0.455	0.460	0.9
330		25x36	0.579	0.295	0.303	1.2
470		25x42	0.406	0.205	0.214	1.8
470		30x32	0.406	0.205	0.214	1.7
680		30x42	0.281	0.150	0.148	2.0
1000		30x57	0.191	0.099	0.105	2.5
1000		35x42	0.191	0.099	0.105	2.5
1500		35x57	0.127	0.076	0.080	3.0
100	350	25x26	1.910	0.880	1.010	0.9
150		25x32	1.273	0.640	0.669	1.1
220		25x42	0.868	0.455	0.460	1.3
220		30x32	0.868	0.455	0.460	1.3
330		30x42	0.579	0.295	0.303	1.7
470		30x52	0.406	0.200	0.214	2.0
680		35x52	0.281	0.145	0.148	2.1
100	385	25x32	1.910	0.880	1.010	0.9
150		25x42	1.273	0.640	0.669	1.1
220		30x32	0.868	0.455	0.460	1.3
330		30x52	0.579	0.293	0.303	1.8
470		35x52	0.406	0.200	0.214	2.0
680		35x62	0.281	0.145	0.148	2.1
100	400	25x32	1.910	0.880	1.010	0.9
150		25x42	1.273	0.640	0.669	1.1
220		30x32	0.868	0.455	0.460	1.3
330		30x52	0.579	0.295	0.303	1.8
470		35x52	0.406	0.200	0.214	2.0
680		35x62	0.281	0.145	0.148	2.1
100	450	25x36	1.91	0.880	1.10	0.90
100		30x32	1.91	0.880	1.10	0.90
150		30x42	1.28	0.640	0.70	1.15
150		30x36	1.28	0.640	0.70	1.15
220		30x52	0.87	0.455	0.50	1.35
330		35x52	0.58	0.295	0.31	1.90
470		35x57	0.41	0.200	0.25	1.98
680		35x73	0.30	0.145	0.18	2.25