



EB Series

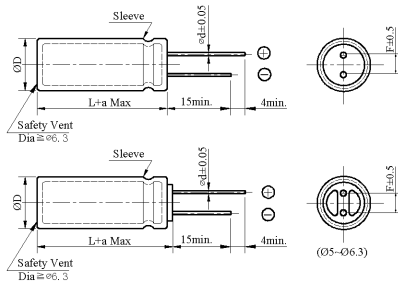
- Extremely low impedance, Downsize and high ripple current
- Suitable for main board



◆ SPECIFICATIONS

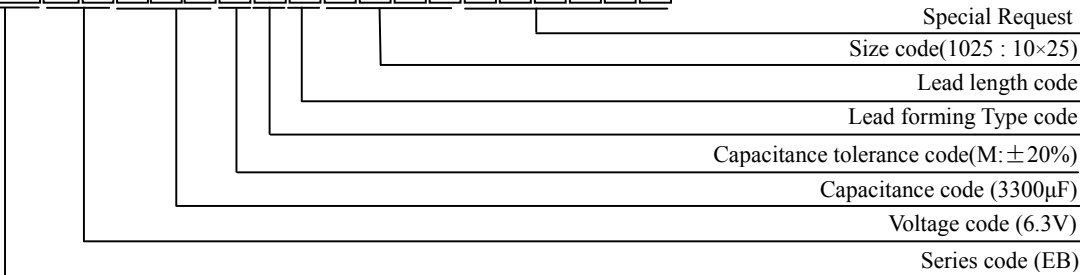
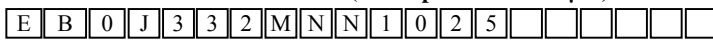
Item	Performance Characteristics												
Category Temperature Range	-40 ~ +105°C												
Working Voltage Range	6.3 ~ 16Vdc												
Capacitance Range	82 ~ 3,300 µF												
Capacitance Tolerance	±20% (at 25°C and 120Hz)												
Dissipation Factor (tanδ) (at 25°C, 120Hz)	<table border="1"> <tr> <td>Rated Voltage (V)</td> <td>6.3</td> <td>10</td> <td>16</td> </tr> <tr> <td>tanδ(Max)</td> <td>0.15</td> <td>0.14</td> <td>0.12</td> </tr> </table>	Rated Voltage (V)	6.3	10	16	tanδ(Max)	0.15	0.14	0.12				
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The above values should be increased by 0.02 for every additional 1000µF													
Leakage Current	I=0.03CV or 3µA whichever is greater I : Leakage current (µA) C : Rated capacitance (µF) V : Rated voltage (V) Impress the rated voltage for 2 minutes												
Low Temperature Characteristics Impedance Ratio(MAX)	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>6.3</td> <td>10</td> <td>16</td> </tr> <tr> <td>Z(-40°C)/Z(+20°C)</td> <td>8</td> <td>6</td> <td>6</td> </tr> </table>	Rated voltage (V)	6.3	10	16	Z(-40°C)/Z(+20°C)	8	6	6				
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Z(-40°C)/Z(+20°C)	8	6	6										
(at 120Hz)													
Endurance	The following specifications shall be satisfied when the capacitors are restored to 25°C after subjected to DC voltage with the rated ripple current is applied for 1,000~2,000 hours at 105°C												
	<table border="1"> <tr> <td>Capacitance change</td> <td>≒ ±25% of the initial value</td> <td>Size</td> <td>Life time (hours)</td> </tr> <tr> <td>Dissipation factor(tanδ)</td> <td>≒ 200% of the specified value</td> <td>≒ 6.3Φ</td> <td>1,000</td> </tr> <tr> <td>Leakage current</td> <td>≒ specified value</td> <td>≒ 8 Φ</td> <td>2,000</td> </tr> </table>	Capacitance change	≒ ±25% of the initial value	Size	Life time (hours)	Dissipation factor(tanδ)	≒ 200% of the specified value	≒ 6.3Φ	1,000	Leakage current	≒ specified value	≒ 8 Φ	2,000
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	Dissipation factor(tanδ)	≒ 200% of the specified value	≒ 6.3Φ	1,000									
Leakage current	≒ specified value	≒ 8 Φ	2,000										
Shelf Life	The following requirements shall be satisfied when the capacitor are restored to 25°C after exposing them for 500 hours at 105°C without voltage applied.												
	<table border="1"> <tr> <td>Capacitance change</td> <td>≒ ±25% of the initial value</td> </tr> <tr> <td>Dissipation factor(tanδ)</td> <td>≒ 200% of the specified value</td> </tr> <tr> <td>Leakage current</td> <td>≒ 200% of the specified value</td> </tr> </table>	Capacitance change	≒ ±25% of the initial value	Dissipation factor(tanδ)	≒ 200% of the specified value	Leakage current	≒ 200% of the specified value						
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	Dissipation factor(tanδ)	≒ 200% of the specified value											
Leakage current	≒ 200% of the specified value												
Others	Conforms to JIS-C-5101-4 (1998), characteristic W												

◆ DIMENSIONS (mm)



ΦD	5	6.3	8	10	12.5
ΦD	ΦD + 0.5 Max				
Φd	0.5	0.5	0.6	0.6	0.6
F	2.0	2.5	3.5	5.0	5.0
a	L + 1.5 Max				

◆ PART NUMBER SYSTEM(Example : 6.3V 3300µF)



EB Series

◆ Case size & Permissible rated ripple current

Nominal Capacitance (uF)	6.3V			10V			16V		
	Case Size ΦD×L (mm)	Impedance @20°C (Ω _{max} /100kHz)	Max. Rated ripple current @105°C 100kHz (mA rms)	Case Size ΦD×L (mm)	Impedance @20°C (Ω _{max} /100kHz)	Max. Rated ripple current @105°C 100kHz (mA rms)	Case Size ΦD×L (mm)	Impedance @20°C (Ω _{max} /100kHz)	Max. Rated ripple current @105°C 100kHz (mA rms)
82	5×11	1.850	165	5×11	1.350	200	6.3×11	1.200	250
100	5×11	1.650	180	5×11	1.180	260	6.3×11	0.980	300
150	6.3×11	1.320	215	6.3×11	0.960	340	6.3×11	0.880	350
220	6.3×11	0.680	295	6.3×11	0.480	425	8×11.5	0.420	430
330	6.3×11	0.320	425	8×11.5	0.250	525	8×11.5	0.180	795
470	8×11.5	0.078	605	8×11.5	0.052	805	8×11.5	0.036	1140
680	8×11.5	0.052	805	8×11.5	0.036	1140	8×15	0.028	1490
							10×12.5	0.026	1540
820	8×15	0.036	1140	8×15	0.033	1200	10×16	0.024	1605
1000	8×15	0.032	1210	8×15	0.028	1490	8×20	0.019	1870
				10×12.5	0.026	1540	10×16	0.019	2000
1200	8×15	0.028	1490	10×16	0.024	1605	10×20	0.017	2110
1500	8×20	0.016	1870	8×20	0.019	1870	10×20	0.013	2550
	10×12.5	0.026	1540						
1800	8×20	0.021	1870	10×20	0.013	2550	10×25	0.012	2800
	10×16	0.019	2000						
2200	10×20	0.013	2550	10×25	0.012	2800	10×25	0.012	2950
3300	10×25	0.012	2800	10×25	0.012	2950	12.5×25	0.012	3050

◆ RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Vdc	Frequency (Hz)				
	50/60	120	1K	10K	100K
6.3 ~16	0.60	0.75	0.90	0.98	1.00