

Radial Lead Type

Series: EB Type : A

Country of Origin

Japan
Malaysia
China



- Features Endurance: 105°C 5000 to 10000 h
High Ripple High Frequency(High Voltage)

■ Specifications

Category temp. range	-40 to +105°C	-25 to +105°C												
Rated W.V. Range	10 to 63 V .DC	160 to 450 V .DC												
Nominal Cap. Range	0.47 to 3300 μ F	10 to 330 μ F												
Capacitance Tolerance	$\pm 20\%$ (120Hz/+20°C)													
DC Leakage Current	$I \leq 0.01$ CV or 3(μ A) after 2 minutes application of rated working voltage at +20°C(Whichever, greater)	$I \leq 0.06$ CV + 10(μ A) application of rated working voltage at +20°C after 2 minutes												
$\tan \delta$	Please see the attached standard products list													
Endurance	After following life test with DC voltage and +105±2°C ripple current value applied (The sum of DC and ripple peak voltage shall not exceed the rated working voltage), the capacitors shall meet the limits specified below. (10 to 63V.DC) Duration : 5000 hours ($\phi 5 \times 11$ to 8×11.5), 7000hours ($\phi 5 \times 15$ to $\phi 6.3 \times 15$) 10000 hours ($\phi 8 \times 15$ to 12.5×25) Post test requirement at +20 °C <table border="1"> <tr> <td>Capacitance change</td> <td>$\pm 30\%$ of initial measured value</td> </tr> <tr> <td>$\tan \delta$</td> <td>$\leq 300\%$ of initial specified value</td> </tr> <tr> <td>DC leakage current</td> <td>\leq initial specified value</td> </tr> </table> (160 to 450V.DC) Duration : 5000hours <table border="1"> <tr> <td>Capacitance change</td> <td>$\pm 20\%$ of initial measured value</td> </tr> <tr> <td>$\tan \delta$</td> <td>$\leq 200\%$ of initial specified value</td> </tr> <tr> <td>DC leakage current</td> <td>\leq initial specified value</td> </tr> </table>		Capacitance change	$\pm 30\%$ of initial measured value	$\tan \delta$	$\leq 300\%$ of initial specified value	DC leakage current	\leq initial specified value	Capacitance change	$\pm 20\%$ of initial measured value	$\tan \delta$	$\leq 200\%$ of initial specified value	DC leakage current	\leq initial specified value
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$\tan \delta$	$\leq 200\%$ of initial specified value													
DC leakage current	\leq initial specified value													
Shelf Life	After storage for 1000 hours at +105±2 °C with no voltage applied and then being stabilized at +20 °C, capacitors shall meet the limits specified in Endurance. (With voltage treatment)													

■ Frequency corection factor for ripple current

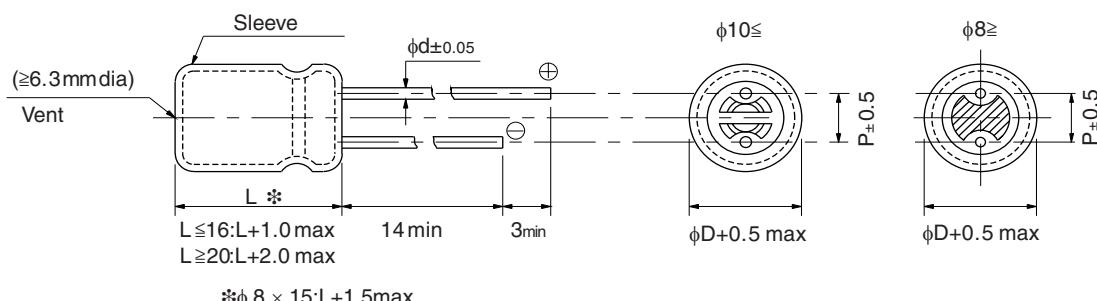
(10 to 63 V. DC)

Capacitance (μ F)	Frequency(Hz)				
	60	120	1k	10k	100k
0.47 to 10	0.75	1	1.40	1.55	1.65
22 to 470	0.85	1	1.20	1.25	1.30
1000 to 3300	0.95	1	1.05	1.10	1.15

(160 to 450 V. DC)

W.V.(V.DC)	Frequency(Hz)			
	120	1k	10k to 30k	30k to 100k
160 to 250	0.55	0.85	0.90	1.00
350 to 450	0.50	0.80	0.90	1.00

■ Dimensions in mm (not to scale)



* $\phi 8 \times 15$: $L+1.5$ max

Body Dia. ϕ D	5	6.3	8	10	12.5	16	18
Lead Dia. ϕ d	0.5	0.5	0.6	0.6	0.6	0.8	0.8
Lead space P	2.0	2.5	3.5	5.0	5.0	7.5	7.5

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■ Standard Products(Low Voltage)

W.V. (V)	Cap. (±20%) (μF)	Case size		Specification			Lead Length				Part No.	Min. Packaging Q'ty		
		Dia. (mm)	Length (mm)	Ripple current (120Hz) (+105°C) (mA)	tan δ (120Hz) (+20°C)	Endur- ance (mm)	Lead Dia. (mm)	Lead Space				Straight Leads (pcs)	Taping (pcs)	
								Straight	Taping ※B (mm)	Taping ※H				
10	100	5	15	105	0.30	7000	0.5	2.0	5.0	2.5	EEUEB1A101()	200	2000	
		5	11	66	0.30	5000	0.5	2.0	5.0	2.5	EEUEB1A101S()	200	2000	
	220	6.3	15	152	0.30	7000	0.5	2.5	5.0	2.5	EEUEB1A221()	200	2000	
		6.3	11.2	100	0.30	5000	0.5	2.5	5.0	2.5	EEUEB1A221S()	200	2000	
	470	8	15	278	0.30	10000	0.6	3.5	5.0		EEUEB1A471()	200	1000	
		8	11.5	180	0.30	5000	0.6	3.5	5.0		EEUEB1A471S()	200	1000	
	2200	12.5	20	540	0.32	10000	0.6	5.0	5.0		EEUEB1A222()	200	500	
	3300	12.5	25	802	0.34	10000	0.6	5.0	5.0		EEUEB1A332()	200	500	
16	1000	10	20	430	0.25	10000	0.6	5.0	5.0		EEUEB1C102()	200	500	
	2200	12.5	25	706	0.27	10000	0.6	5.0	5.0		EEUEB1C222()	200	500	
25	47	5	15	78	0.22	7000	0.5	2.0	5.0	2.5	EEUEB1E470()	200	2000	
		5	11	55	0.22	5000	0.5	2.0	5.0	2.5	EEUEB1E470S()	200	2000	
	100	6.3	15	135	0.22	7000	0.5	2.5	5.0	2.5	EEUEB1E101()	200	2000	
		6.3	11.2	95	0.22	5000	0.5	2.5	5.0	2.5	EEUEB1E101S()	200	2000	
	220	8	11.5	125	0.22	5000	0.6	3.5	5.0		EEUEB1E221S()	200	1000	
	330	8	15	255	0.22	10000	0.6	3.5	5.0		EEUEB1E331()	200	1000	
	470	10	16	321	0.22	10000	0.6	5.0	5.0		EEUEB1E471()	200	500	
	1000	12.5	20	498	0.22	10000	0.6	5.0	5.0		EEUEB1E102()	200	500	
35	33	5	15	66	0.18	7000	0.5	2.0	5.0	2.5	EEUEB1V330()	200	2000	
		5	11	46	0.18	5000	0.5	2.0	5.0	2.5	EEUEB1V330S()	200	2000	
	220	8	15	197	0.18	10000	0.6	3.5	5.0		EEUEB1V221()	200	1000	
	330	10	16	278	0.18	10000	0.6	5.0	5.0		EEUEB1V331()	200	500	
	470	10	20	349	0.18	10000	0.6	5.0	5.0		EEUEB1V471()	200	500	
	1000	12.5	25	586	0.18	10000	0.6	5.0	5.0		EEUEB1V102()	200	500	
50	0.47	5	11	4	0.15	5000	0.5	2.0	5.0	2.5	EEUEB1HR47S()	200	2000	
	1	5	11	8	0.15	5000	0.5	2.0	5.0	2.5	EEUEB1H1R0S()	200	2000	
	2.2	5	11	15	0.15	5000	0.5	2.0	5.0	2.5	EEUEB1H2R2S()	200	2000	
	3.3	5	11	18	0.15	5000	0.5	2.0	5.0	2.5	EEUEB1H3R3S()	200	2000	
	4.7	5	11	18	0.15	5000	0.5	2.0	5.0	2.5	EEUEB1H4R7S()	200	2000	
	10	5	11	27	0.15	5000	0.5	2.0	5.0	2.5	EEUEB1H100S()	200	2000	
	22	5	15	55	0.15	7000	0.5	2.0	5.0	2.5	EEUEB1H220()	200	2000	
		5	11	39	0.15	5000	0.5	2.0	5.0	2.5	EEUEB1H220S()	200	2000	
	47	6.3	15	87	0.15	7000	0.5	2.5	5.0	2.5	EEUEB1H470()	200	2000	
		6.3	11.2	61	0.15	5000	0.5	2.5	5.0	2.5	EEUEB1H470S()	200	2000	
	100	8	11.5	99	0.15	5000	0.6	3.5	5.0		EEUEB1H101S()	200	1000	
	220	10	16	234	0.15	10000	0.6	5.0	5.0		EEUEB1H221()	200	500	
63	330	10	20	293	0.15	10000	0.6	5.0	5.0		EEUEB1H331()	200	500	
	470	12.5	20	370	0.15	10000	0.6	5.0	5.0		EEUEB1H471()	200	500	
	0.47	5	15	6	0.12	7000	0.5	2.0	5.0	2.5	EEUEB1JR47()	200	2000	
		5	11	4.5	0.12	5000	0.5	2.0	5.0	2.5	EEUEB1JR47S()	200	2000	
1	5	15	12	0.12	7000	0.5	2.0	5.0	2.5	EEUEB1J1R0()	200	2000		
		5	11	9	0.12	5000	0.5	2.0	5.0	2.5	EEUEB1J1R0S()	200	2000	

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■ Standard Products(Low Voltage)

W.V. (V)	Cap. (±20%) (μF)	Case size		Specification			Lead Length			Part No.	Min. Packaging Q'ty		
		Dia. (mm)	Length (mm)	Ripple current (120Hz) (+105°C) (mA)	tan δ (120Hz) (+20°C)	Endur- ance (mm)	Lead Dia. (mm)	Lead Space			Straight (mm)	Taping *B (mm)	Taping *H (mm)
63	2.2	5	15	22	0.12	7000	0.5	2.0	5.0	2.5	EEUEB1J2R2()	200	2000
		5	11	16.5	0.12	5000	0.5	2.0	5.0	2.5	EEUEB1J2R2S()	200	2000
	3.3	5	15	30	0.12	7000	0.5	2.0	5.0	2.5	EEUEB1J3R3()	200	2000
		5	11	20	0.12	5000	0.5	2.0	5.0	2.5	EEUEB1J3R3S()	200	2000
	4.7	5	15	30	0.12	7000	0.5	2.0	5.0	2.5	EEUEB1J4R7()	200	2000
		5	11	23	0.12	5000	0.5	2.0	5.0	2.5	EEUEB1J4R7S()	200	2000
	10	5	15	46	0.12	7000	0.5	2.0	5.0	2.5	EEUEB1J100()	200	2000
		5	11	30	0.12	5000	0.5	2.0	5.0	2.5	EEUEB1J100S()	200	2000
	22	6.3	15	55	0.12	7000	0.5	2.5	5.0	2.5	EEUEB1J220()	200	2000
	33	6.3	15	71	0.12	7000	0.5	2.5	5.0	2.5	EEUEB1J330()	200	2000
		6.3	11.2	50	0.12	5000	0.5	2.5	5.0	2.5	EEUEB1J330S()	200	2000
	47	8	15	94	0.12	10000	0.6	3.5	5.0		EEUEB1J470()	200	1000
		8	11.5	80	0.12	5000	0.6	3.5	5.0		EEUEB1J470S()	200	1000
	100	8	15	180	0.12	10000	0.6	3.5	5.0		EEUEB1J101()	200	1000
	220	10	20	292	0.12	10000	0.6	5.0	5.0		EEUEB1J221()	200	500
	330	12.5	20	381	0.12	10000	0.6	5.0	5.0		EEUEB1J331()	200	500
	470	12.5	25	454	0.12	10000	0.6	5.0	5.0		EEUEB1J471()	200	500

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W.V. (V)	Cap. (±20%) (μF)	Case size		Specification		Lead Length			Part No.	Min. Packaging Qty	
		Dia. (mm)	Length (mm)	Ripple current (100kHz) (+105°C) (mA)	tan δ (120Hz) (+20°C)	Lead Dia. (mm)	Lead Space Straight (mm)	Taping ※B (mm)		Straight Leads (pcs)	Taping (pcs)
160	22	10	20	470	0.15	0.6	5.0	5.0	EEUEB2C220()	200	500
	33	10	20	470	0.15	0.6	5.0	5.0	EEUEB2C330()	200	500
	47	12.5	20	600	0.15	0.6	5.0	5.0	EEUEB2C470()	200	500
	68	12.5	25	750	0.15	0.6	5.0	5.0	EEUEB2C680()	200	500
	16	20	750	0.15	0.8	7.5	7.5	EEUEB2C680S()	100	250	
	100	16	25	1060	0.15	0.8	7.5	7.5	EEUEB2C101()	100	250
	18	20	1060	0.15	0.8	7.5	7.5	EEUEB2C101S()	100	250	
	150	16	31.5	1280	0.15	0.8	7.5	EEUEB2C151	100		
	18	25	1280	0.15	0.8	7.5	7.5	EEUEB2C151S()	100	250	
	220	16	31.5	1280	0.15	0.8	7.5	EEUEB2C221	100		
	18	25	1280	0.15	0.8	7.5	7.5	EEUEB2C221S()	100	250	
	330	18	31.5	1690	0.15	0.8	7.5	EEUEB2C331	50		
200	22	10	20	470	0.15	0.6	5.0	5.0	EEUEB2D220()	200	500
	33	12.5	20	600	0.15	0.6	5.0	5.0	EEUEB2D330()	200	500
	47	12.5	20	600	0.15	0.6	5.0	5.0	EEUEB2D470()	200	500
	68	12.5	25	750	0.15	0.6	5.0	5.0	EEUEB2D680()	200	500
	16	20	750	0.15	0.8	7.5	7.5	EEUEB2D680S()	100	250	
	100	16	25	1060	0.15	0.8	7.5	7.5	EEUEB2D101()	100	250
	18	20	1060	0.15	0.8	7.5	7.5	EEUEB2D101S()	100	250	
	150	16	31.5	1280	0.15	0.8	7.5	EEUEB2D151	100		
	18	25	1280	0.15	0.8	7.5	7.5	EEUEB2D151S()	100	250	
	220	18	31.5	1690	0.15	0.8	7.5	EEUEB2D221	100		
250	22	12.5	20	560	0.15	0.6	5.0	5.0	EEUEB2E220()	200	500
	33	12.5	20	560	0.15	0.6	5.0	5.0	EEUEB2E330()	200	500
	47	12.5	25	710	0.15	0.6	5.0	5.0	EEUEB2E470()	200	500
	16.0	20	710	0.15	0.8	7.5	7.5	EEUEB2E470S()	100	250	
	68	16	25	990	0.15	0.8	7.5	7.5	EEUEB2E680()	100	250
	18	20	990	0.15	0.8	7.5	7.5	EEUEB2E680S()	100	250	
	100	16	31.5	1200	0.15	0.8	7.5	EEUEB2E101	100		
	18	25	1200	0.15	0.8	7.5	7.5	EEUEB2E101S()	100	250	
	150	18	31.5	1470	0.15	0.8	7.5	EEUEB2E151	50		
	10	10	20	270	0.20	0.6	5.0	5.0	EEUEB2V100()	200	500
350	22	12.5	20	350	0.20	0.6	5.0	5.0	EEUEB2V220()	200	500
	33	16	20	480	0.20	0.8	7.5	7.5	EEUEB2V330S()	100	250
	47	16	25	640	0.20	0.8	7.5	7.5	EEUEB2V470()	100	250
	18	20	640	0.20	0.8	7.5	7.5	EEUEB2V470S()	100	250	
	68	16	31.5	780	0.20	0.8	7.5	EEUEB2V680	100		
	18	25	780	0.20	0.8	7.5	7.5	EEUEB2V680S()	100	250	
	100	18	31.5	970	0.20	0.8	7.5	EEUEB2V101	50		
	10	10	20	250	0.24	0.6	5.0	5.0	EEUEB2G100()	200	500
400	22	12.5	25	410	0.24	0.6	5.0	5.0	EEUEB2G220()	200	500
	16	20	410	0.24	0.8	7.5	7.5	EEUEB2G220S()	100	250	

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■ Standard Products

W.V. (V)	Cap. (±20%) (μF)	Case size		Specification		Lead Length		Part No.	Min. Packaging Qty	
		Dia. (mm)	Length (mm)	Ripple current (100kHz) (+105°C)	tan δ (120Hz) (+20°C)	Lead Dia. (mm)	Lead Space Straight (mm)		Straight Leads (pcs)	Taping (pcs)
400	33	16	25	600	0.24	0.8	7.5	EEUEB2G330()	100	250
		18	20	600	0.24	0.8	7.5	EEUEB2G330S()	100	250
	47	16	31.5	730	0.24	0.8	7.5	EEUEB2G470	100	
		18	25	730	0.24	0.8	7.5	EEUEB2G470S()	100	250
450	10	12.5	20	310	0.24	0.6	5.0	EEUEB2W100()	200	500
		16	25	560	0.24	0.8	7.5	EEUEB2W220()	100	250
	22	18	20	560	0.24	0.8	7.5	EEUEB2W220S()	100	250
		16	31.5	680	0.24	0.8	7.5	EEUEB2W330	100	
	33	18	25	680	0.24	0.8	7.5	EEUEB2W330S()	100	250
		47	18	31.5	850	0.24	0.8	7.5	EEUEB2W470	50

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