

# BR1, BRK (old series: HR, HRK) CONDUCTIVE POLYMER HYBRID ALUMINUM ELECTROLYTIC CAPACITORS **ELNA**

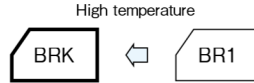
## Hybrid Capacitors radial lead type

GREEN CAP Low ESR 105°C 10000hours 125°C 6000hours

- Low ESR and high ripple current are realized.
- Equivalent to conductive polymer type Aluminum Electrolytic Capacitor.
- BR1 series : Guaranteed 105°C, 10000 hours.
- BRK series: Guaranteed 125°C, 6000 hours (4000 hours: 80V or more).



Marking color : Blue print

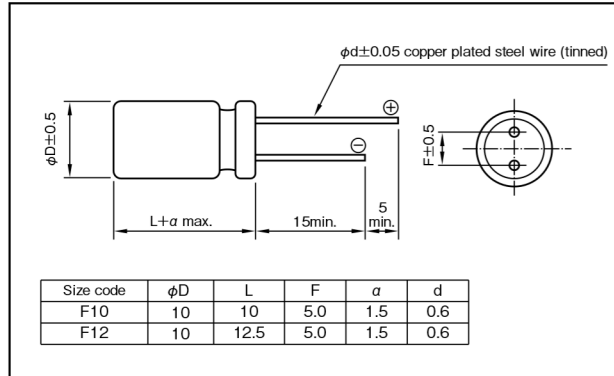


### Specifications

Item	Performance																		
Category temperature range (°C)	BR1 series : — 55 to +105 BRK series : — 55 to +125																		
Tolerance at rated capacitance (%)	±20 (20°C, 120Hz)																		
Leakage current (μA) (max.)	25V to 80V: 0.01CV or 3 whichever is larger (after 2 minutes) 100V : 0.05CV or 15 whichever is larger (after 2 minutes), : Rated capacitance (μF) : V : Rated voltage (V) (20°C)																		
Tangent of loss angle (tanδ)	<table border="1"> <thead> <tr> <th>Rated voltage (V)</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>80</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>tanδ (max.)</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.08</td> <td>0.08</td> <td>0.08</td> </tr> </tbody> </table> <p>(20°C, 120Hz)</p>	Rated voltage (V)	25	35	50	63	80	100	tanδ (max.)	0.14	0.12	0.10	0.08	0.08	0.08				
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Shelf life	Test time and temperature : 1000hours (BR1 series 105°C), 1000hours (BRK series 125°C) Voltage application treatment : According to JIS C5101-4 4.1.																		

### Outline Drawing

Unit : mm



### Coefficient of Frequency for Rated Ripple Current

Frequency (Hz)	120	1k	10k	100k
Rated voltage (V)				
25 to 100	0.10	0.30	0.60	1

### Product code system (\*For general product)

10000hours guaranteed: BR1 series (example : 35V270μF)

RS*	BR1	271	M	1G	F10	100**	E
Category code	Series code	capacitance code	Cap tol. code	Voltage code	Size code	Taping and packing code	Additional code

4000hours guaranteed: BRK series (example : 63V56μF)

RS*	BRK	560	M	4E	F10	100**	E
Category code	Series code	capacitance code	Cap tol. code	Voltage code	Size code	Taping and packing code	Additional code

6000hours guaranteed: BRK-B series (example : 35V270μF)

RS*	BRK	271	M	1G	F10	100**	B
Category code	Series code	capacitance code	Cap tol. code	Voltage code	Size code	Taping and packing code	Additional code

\*\* "100" : "T2" taping and packing code.

"T2" is the standard packing for BR1 and BRK.

· For details, refer to the various "Product Code System" pages.

## BR1 series: Standard Ratings

Rated voltage (V) Rated capacitance (μF)	25 (1T)			35 (1G)			50 (1U)			63 (4E)		
	Item Case φD×L (mm)	ESR (mΩ max.)	Rated ripple current (mA rms)	Case φD×L (mm)	ESR (mΩ max.)	Rated ripple current (mA rms)	Case φD×L (mm)	ESR (mΩ max.)	Rated ripple current (mA rms)	Case φD×L (mm)	ESR (mΩ max.)	Rated ripple current (mA rms)
56	—	—	—	—	—	—	—	—	—	10×10	30	1800
100	—	—	—	—	—	—	10×10	28	2000	10×12.5	26	2500
150	—	—	—	—	—	—	10×12.5	24	3000	—	—	—
270	—	—	—	10×10	20	2500	—	—	—	—	—	—
330	10×10	20	2500	—	—	—	—	—	—	—	—	—
390	—	—	—	10×12.5	18	3500	—	—	—	—	—	—
560	10×12.5	18	3500	—	—	—	—	—	—	—	—	—

Rated voltage (V) Rated capacitance (μF)	80 (1R)			100 (1H)		
	Item Case φD×L (mm)	ESR (mΩ max.)	Rated ripple current (mA rms)	Case φD×L (mm)	ESR (mΩ max.)	Rated ripple current (mA rms)
15	—	—	—	10×10	45	1600
33	10×10	36	1700	—	—	—

(Note) Rated ripple current : 105°C , 100kHz ; ESR : 20°C , 100kHz

## BRK series: Standard Ratings (●Marked: 6000 hours guaranteed)

Rated voltage (V) Rated capacitance (μF)	25 (1T)			35 (1G)			50 (1U)			63 (4E)		
	Item Case φD×L (mm)	ESR (mΩ max.)	Rated ripple current (mA rms)	Case φD×L (mm)	ESR (mΩ max.)	Rated ripple current (mA rms)	Case φD×L (mm)	ESR (mΩ max.)	Rated ripple current (mA rms)	Case φD×L (mm)	ESR (mΩ max.)	Rated ripple current (mA rms)
56	—	—	—	—	—	—	—	—	—	● 10×10	30	1400
100	—	—	—	—	—	—	● 10×10	28	1600	● 10×12.5	26	2000
150	—	—	—	—	—	—	● 10×12.5	24	2500	—	—	—
270	—	—	—	● 10×10	20	2000	—	—	—	—	—	—
330	● 10×10	20	2000	—	—	—	—	—	—	—	—	—
390	—	—	—	● 10×12.5	18	3000	—	—	—	—	—	—
560	● 10×12.5	18	3000	—	—	—	—	—	—	—	—	—

Rated voltage (V) Rated capacitance (μF)	80 (1R)			100 (1H)		
	Item Case φD×L (mm)	ESR (mΩ max.)	Rated ripple current (mA rms)	Case φD×L (mm)	ESR (mΩ max.)	Rated ripple current (mA rms)
15	—	—	—	10×10	45	1000
33	10×10	36	1200	—	—	—

(Note) Rated ripple current : 125°C , 100kHz ; ESR : 20°C , 100kHz