

Capacitors for Power Electronics

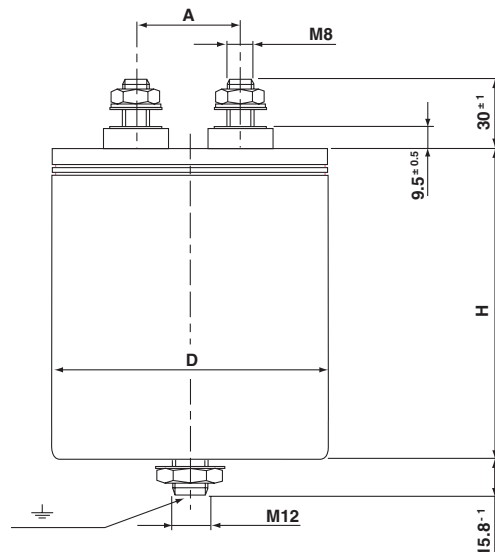


FEATURES

- High impulse current rating up to 10 kA
- Low self-inductance of < 100 nH
- High reliability and life expectancy
- Withstands heavy duty shock and vibration
- Non-polar dielectric
- Dry, resin filled

APPLICATIONS

- DC-linking and DC-filtering in industry and traction converters
- DC-linking in low-power drives
- Impulse discharge capacitors for magnetizing and welding
- Replacement of aluminum electrolytic capacitors (lower capacitance, higher currents)



GENERAL SPECIFICATIONS

Dielectric	Polypropylene, selfhealing
Temperature coefficient (TCC)	-2.3 % from -20 °C to +70 °C
Dissipation factor ($\tan \delta_0$)	< 2×10^{-4}
Capacitance tolerance	± 5 %
Operating temperature	-40 °C to +70 °C at U_R -40 °C to +100 °C at $0.5 \cdot U_R$
Inductance	< 100 nH
Lifetime expectancy	200.000 hours at U_R and 60 °C
Reliability	200 FIT
Test voltage	Terminal/Terminal = $1.5 \times U_{RDC}$, 10s Terminal/Earth = $2 \times U_R + 1000$ VAC, 60 s
Casing material	Aluminum
Filling	Resin Polyurethane, UL 94, V-0
Standards	IEC 61071-1, IEC 61881



TYPE DESCRIPTION									
Type DCMKP	Capacitance μF	Rated DC (V)	Voltage AC (V)	R_s mOhm	R_{th} $^{\circ}\text{K/W}$	I_{max} Aeff	Dia (mm)	Height (mm)	A (mm)
880-200 IBR	200	880	220	3.4	15.0	34	64	105	32
880-270 IBR	270	880	220	4.4	11.7	35	64	130	32
880-370 IBR	370	880	220	2.2	12.8	46	84	105	32
880-510 IBR	510	880	220	2.8	9.8	48	84	130	32
1.1-130 IBR	130	1100	275	3.9	14.9	32	64	105	32
1.1-175 IBR	175	1100	275	5.2	11.6	32	64	130	32
1.1-240 IBR	240	1100	275	2.5	12.7	43	84	105	32
1.1-280 IBR	280	1100	275	7.7	7.7	32	64	185	32
1.1-330 IBR	330	1100	275	3.2	9.8	44	84	130	32
1.1-525 IBR	525	1100	275	4.5	6.5	46	84	185	32
1.1-1000 IBR	1000	1100	275	2.9	5.4	62	116	185	50
1.3-90 IBR	90	1300	325	4.6	15.0	29	64	105	32
1.3-120 IBR	120	1300	325	6.0	11.7	29	64	130	32
1.3-165 IBR	165	1300	325	2.9	12.8	40	84	105	32
1.3-195 IBR	195	1300	325	9.0	7.7	30	64	185	32
1.3-230 IBR	230	1300	325	3.6	9.8	41	84	130	32
1.3-365 IBR	365	1300	325	5.1	6.5	42	84	185	32
1.3-710 IBR	710	1300	325	3.2	5.4	59	116	185	50
1.55-65 IBR	65	1550	385	5.2	15.1	28	64	105	32
1.55-90 IBR	90	1550	385	6.8	11.6	28	64	130	32
1.55-120 IBR	120	1550	385	3.2	12.9	38	84	105	32
1.55-145 IBR	145	1550	385	10.3	7.7	28	64	185	32
1.55-165 IBR	165	1550	385	4.1	9.9	39	84	130	32
1.55-265 IBR	265	1550	385	5.9	6.6	39	84	185	32
1.55-520 IBR	520	1550	385	3.6	5.4	56	116	185	50
1.75-50 IBR	50	1750	440	5.7	15.0	26	64	105	32
1.75-65 IBR	65	1750	440	7.6	11.6	26	64	130	32
1.75-90 IBR	90	1750	440	3.5	12.9	36	84	105	32
1.75-110 IBR	110	1750	440	11.5	7.7	26	64	185	32
1.75-125 IBR	125	1750	440	4.5	9.9	37	84	130	32
1.75-200 IBR	200	1750	440	6.6	6.6	37	84	185	32
1.75-390 IBR	390	1750	440	3.9	5.5	53	116	185	50
2.0-35 IBR	35	2000	500	6.4	15.2	25	64	105	32
2.0-50 IBR	50	2000	500	8.4	11.6	25	64	130	32
2.0-70 IBR	70	2000	500	3.8	12.8	35	84	105	32
2.0-85 IBR	85	2000	500	12.9	7.8	25	64	185	32
2.0-110 IBR	100	2000	500	5.0	9.9	35	84	130	32
2.0-160 IBR	160	2000	500	7.2	6.6	36	84	185	32
2.0-310 IBR	310	2000	500	4.3	5.5	51	116	185	50
2.2-30 IBR	30	2200	550	7.0	15.1	24	64	105	32
2.2-40 IBR	40	2200	550	9.2	11.6	24	64	130	32
2.2-55 IBR	55	2200	550	4.1	12.9	33	84	105	32
2.2-70 IBR	70	2200	550	14.2	7.8	24	64	185	32
2.2-80 IBR	80	2200	550	5.4	9.9	34	84	130	32
2.2-130 IBR	130	2200	550	8.0	6.6	34	84	185	32
2.2-250 IBR	250	2200	550	4.7	5.5	49	116	185	50



Disclaimer

All product specifications and data are subject to change without notice.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay for any damages arising or resulting from such use or sale. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.