



# METALLIZED FILM POWER CAPACITOR

DCMKP



## Capacitor for Power Electronics

### KEY BENEFITS

- High impulse current rating up to 10 kA
- Low self-inductance of <math><100\text{ nH}</math>
- 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)

Datasheet is available on our web site at [www.vishay.com](http://www.vishay.com)  
for DCMKP - <http://www.vishay.com/doc?13039>

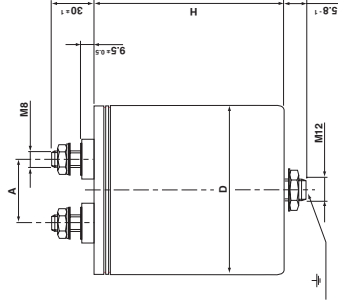
# Capacitors for Power Electronics

## FEATURES

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- Withstands heavy duty shock and vibration
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## GENERAL SPECIFICATIONS

Dielectric	Polypropylene, selfhealing
Temperature coefficient (TCC)	-2.5% from -20 °C to +70 °C
Dissipation factor (tan δ <sub>e</sub> )	< 2 x 10 <sup>-4</sup>
Capacitance tolerance	± 5 %
Operating temperature	-40 °C to +70 °C at U <sub>R</sub> -40 °C to +100 °C at 0.5 U <sub>R</sub>
Inductance	< 100 nH
Lifetime expectancy	200,000 hours at U <sub>R</sub> and 60 °C
Reliability	200 FIT
Test voltage	Terminal/Terminal = 1.5 x U <sub>R</sub> DC; 10s Terminal/Earth = 2 x U <sub>R</sub> + 1000 VAC; 60 s
Casing material	Aluminum
Filling	Resin Polyurethane, UL 94, V-0
Standards	IEC 61071-1, IEC 61881



Revision 23-Jun-05

TYPE DESCRIPTION									
Type DCMKP	Capacitance µF	Rated DC (V)	Voltage AC (V)	Rs mOhm	Rth °C/W	Imax 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