

DCMKP Vishay ESTA

Power Electronic Capacitors (PEC)



ADDITIONAL RESOURCES



FEATURES

- High impulse current rating
- Low inductance
- High reliability and lifetime expectation
- Resistance to heavy-duty shock vibration
- Non-polar dielectric
- Dry resin filled

APPLICATIONS

- DC linking and harmonic filtering in industrial converters and traction converters and transportation
- DC linking in low-power drives
- Impulse discharge capacitors for magnetizing and welding

QUICK REFERENCE DATA							
DESCRIPTION	VALUE						
Rated DC voltage min.	880 V _{DC}						
Rated DC voltage max.	2200 V _{DC}						
Capacitance min.	30 µF						
Capacitance max.	1000 µF						
Capacitance tolerance	± 5 % or ± 10 %						
Technology	Metallized polypropylene film, self-healing						
Dielectric dissipation factor	< 2 x 10 ⁻⁴						
Operating temperature min.	-40 °C						
Operating temperature max.	+85 °C (hotspot)						
Inductance	< 100 nH						
Lifetime expectancy	$>$ 100 000 h at U_{NDC} and $<$ 70 °C hotspot						
Reliability	< 200 FIT						
Test voltage	$U_{tt} = 1.5 \text{ x } U_{NDC}/10 \text{ s}; U_{tc} = 2 \text{ x } U_{NDC} + 1000 \text{ V}_{AC}/10 \text{ s}$						
Casing	Aluminum						
Filling	Dry resin (UL 94 V-0)						
Standard	IEC 61071, IEC 61881-1						

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TYPE DESCR	IPTIO	1									
TYPE DCMKPIBR	C _N (μF)	U _{NDC} (V _{DC})	R _s (mΩ)	R _{th} (K/W)	I _{max.} (A)	Î (kA)	Î _S (kA)	H (mm)	DIA. (mm)	MOQ / PU (pcs)	DRAWING NO.
DCMKP 880, U _{NDC}	_c = 880 V	,									
880-200	200	880	3.0	10.4	27	0.8	2.3	105	64	9	1
880-270	270	880	4.2	8.3	26	0.7	2.2	130	64	9	1
880-370	370	880	1.8	8.4	38	1.4	4.2	105	84.4	4	1
880-510	510	880	2.4	6.7	38	1.4	4.2	130	84.4	4	1
DCMKP 1.1, U _{NDC}	= 1100 \	/							•		
1.1-130	130	1100	3.7	10.4	24	0.6	1.8	105	64	9	1
1.1-175	175	1100	5.1	8.3	24	0.6	1.8	130	64	9	1
1.1-240	240	1100	2.1	8.5	35	1.1	3.4	105	84.4	4	1
1.1-280	280	1100	8.0	5.7	22	0.6	1.8	185	64	9	1
1.1-330	330	1100	2.9	6.8	34	1.1	3.4	130	84.4	4	1
1.1-525	525	1100	4.6	4.8	33	1.1	3.4	185	84.4	4	1
1.1-1000	1000	1100	2.6	3.7	50	2.1	6.3	185	116	4	1
DCMKP 1.3, U _{NDC}	= 1300 \	/							•		•
1.3-90	90	1300	4.3	10.4	22	0.5	1.5	105	64	9	1
1.3-120	120	1300	6.1	9.3	20	0.5	1.5	130	64	9	1
1.3-165	165	1300	2.5	8.6	31	0.9	2.8	105	84.4	4	1
1.3-195	195	1300	9.5	5.8	21	0.5	1.5	185	64	9	1
1.3-230	230	1300	3.4	6.9	31	0.9	2.8	130	84.4	4	1
1.3-365	365	1300	5.3	4.8	31	0.9	2.8	185	84.4	4	1
1.3-710	710	1300	3.0	3.8	46	1.7	5.2	185	116	4	1
DCMKP 1.55, U _{ND}	_C = 1550	v							•		
1.55-65	65	1550	5.1	10.5	19	0.4	1.3	105	64	9	1
1.55-90	90	1550	6.9	8.4	20	0.4	1.3	130	64	9	1
1.55-120	120	1550	2.9	8.7	28	0.8	2.4	105	84.4	4	1
1.55-145	145	1550	11.0	5.8	19	0.4	1.3	185	64	9	1
1.55-165	165	1550	4.0	7.0	29	0.8	2.4	130	84.4	4	1
1.55-265	265	1550	6.2	4.9	28	0.8	2.4	185	84.4	4	1
1.55-520	520	1550	3.5	3.8	42	1.5	4.5	185	116	4	1
DCMKP 1.75, U _{ND}	_C = 1750	V									
1.75-50	50	1750	5.5	10.4	19	0.4	1.1	105	64	9	1
1.75-65	65	1750	7.9	8.4	18	0.4	1.1	130	64	9	1
1.75-90	90	1750	3.2	8.7	27	0.7	2.1	105	84.4	4	1
1.75-110	110	1750	12.2	5.8	18	0.4	1.1	185	64	9	1
1.75-125	125	1750	4.3	7.0	27	0.7	2.1	130	84.4	4	1
1.75-200	200	1750	6.9	4.9	26	0.7	2.1	185	84.4	4	1
1.75-390	390	1750	3.9	3.9	40	1.3	3.9	185	116	4	1

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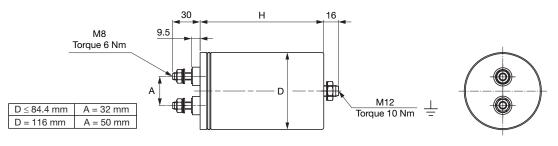
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TYPE DESCRIPTION											
TYPE DCMKPIBR	C _N (µF)	U _{NDC} (V _{DC})	R s (mΩ)	R _{th} (K/W)	I _{max.} (A)	Î (kA)	Î _S (kA)	H (mm)	DIA. (mm)	MOQ / PU (pcs)	DRAWING NO.
DCMKP 2.0, U _{NDC}	= 2000 \	v									
2.0-35	35	2000	6.8	10.7	16	0.3	0.9	105	64	9	1
2.0-50	50	2000	9.1	8.5	17	0.3	0.9	130	64	9	1
2.0-70	70	2000	3.6	8.8	25	0.6	1.8	105	84.4	4	1
2.0-85	85	2000	13.9	5.6	17	0.3	1.0	185	64	9	1
2.0-110	110	2000	4.8	7	26	0.6	1.9	130	84.4	4	1
2.0-160	160	2000	7.6	5.7	23	0.6	1.9	185	84.4	4	1
2.0-310	310	2000	4.3	3.9	38	1.2	3.5	185	116	4	1
DCMKP 2.2, U _{NDC}	= 2200 \	v			•				•		
2.2-30	30	2200	7.1	10.5	16	0.3	0.9	105	64	9	1
2.2-40	40	2200	10.2	8.5	16	0.3	0.9	130	64	9	1
2.2-55	55	2200	4.1	8.9	23	0.5	1.5	105	84.4	4	1
2.2-70	70	2200	15.1	5.8	16	0.3	0.9	185	64	9	1
2.2-80	80	2200	5.3	7	24	0.6	1.8	130	84.4	4	1
2.2-130	130	2200	8.4	4.9	24	0.6	1.7	185	84.4	4	1
2.2-250	250	2200	4.71	3.9	36	1.1	3.1	185	116	4	1

DIMENSIONS in millimeters



Drawing 1

Contact Us

Other voltage, current, and capacitance values are available on request without additional cost and lead time for the individual design.



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