



POWER CAPACITORS

HDMKP



Capacitors for Power Electronics

KEY BENEFITS

- High RMS current rating: up to 150 A
- High impulse current rating: up to 10 kA
- Low self-inductance of < 50 nH
- High reliability and life expectancy
- Withstands heavy-duty shock and vibration
- Non-polar dielectric

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)
- AC filters in UPS

Datasheet is available on our web site at www.vishay.com
for HDMKP - <http://www.vishay.com/doc?13115>

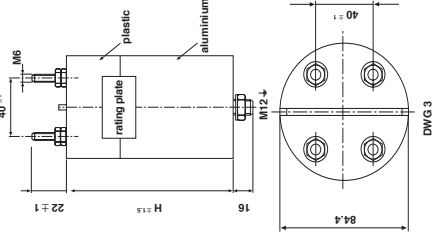
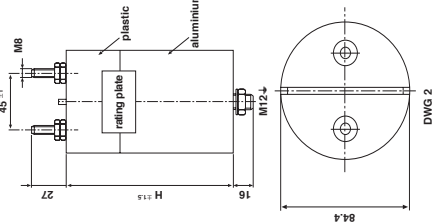
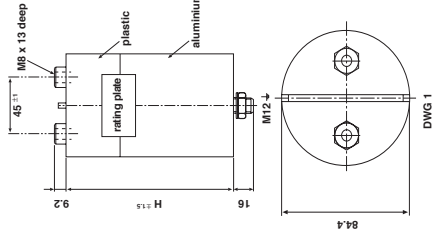
Capacitors for Power Electronics

FEATURES

- Highest RMS current rating, low ESR
- High impulse current rating
- Very low inductance
- Extremely low losses even at high frequencies
- High reliability and life expectancy
- Heavy duty shock and vibration
- Non-polar dielectric
- Dry, resin filled
- Easy mounting by integrated M12 stud on base
- Highest energy content



DIMENSIONS



GENERAL SPECIFICATIONS	
Dielectric	Metallized Polypropylene
Temperature coefficient (TCC)	- 2.3% from - 20°C to + 70°C
Dissipation factor (DF)	< 8 x 10 ⁻⁷ /kHz; < 50 x 10 ⁻⁷ /kHz
Series Resistances (Rs)	< 3mΩ/kHz, 8mΩ/100kHz
Capacitance tolerance	± 5%
Operating temperature	- 40°C to + 70°C at UN - 40°C to + 85°C at 0.7 x UN - 40°C to + 100°C at 0.5 x UN
Inductance	< 50nH
Lifetime expectancy	100,000 hours at UN and 60°C
Reliability	300FIT
Test voltage	Terminal/Terminal = 1.5 x UNDC, 10s Terminal/Earth = 2 x UR + 1000VAC, 60s
Casing material	Aluminum/Lathene; UL 94V0
Filling	Resin Dry, UL 94, V0
Standards	IEC 61071-1, EN 61071, IEC 68-2 and IEC 61881

Revision 26-Mar-03

TYPE DESCRIPTION							
TYPE	DC (V)	AC (V)	CAPACITANCE (µF)	CURRENT* MAX. (A)	du/dt MAX.(V/µs)	HEIGHT (mm)	WEIGHT (kg)
HDMKP	900	220	360	50	15	105	0.71
900-360	900	220	460	100	15	135	0.92
900-460	900	220	720	100	15	185	1.25
900-720	900	220	950	80	15	235	1.6
900-950	900	220	1080	150	15	260	1.75
1.35-160	1350	325	160	50	30	105	0.71
1.35-200	1350	325	200	100	30	135	0.92
1.35-320	1350	325	320	100	30	185	1.25
1.35-400	1350	325	400	80	30	235	1.6
1.35-480	1350	325	480	150	30	260	1.75
2.0-70	2000	500	70	50	50	105	0.71
2.0-90	2000	500	90	100	50	135	0.92
2.0-140	2000	500	140	100	50	185	1.25
2.0-180	2000	500	180	80	50	235	1.6
2.0-210	2000	500	210	150	50	260	1.75
2.25-55	2250	550	55	50	60	105	0.71
2.25-75	2250	550	75	100	60	135	0.92
2.25-110	2250	550	110	100	60	185	1.25
2.25-150	2250	550	150	80	60	235	1.6
2.25-165	2250	550	165	150	60	260	1.75
2.7-40	2700	660	40	50	50	105	0.71
2.7-50	2700	660	50	100	50	135	0.92
2.7-80	2700	660	80	100	50	185	1.25
2.7-100	2700	660	100	80	50	235	1.6
2.7-120	2700	660	120	150	50	260	1.75

Note: * Other voltage and capacitance values are available upon request. Voltage up to 4800VDC
 † Design current for short-time operation at 50°C

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