FILM CAPACITORS

MKP1848S DC-Link

Capacitors - Film Capacitors with Low Profile

Slim Film Capacitors for Mid-Power Electronics

Pb-free

e3

RoHS COMPLIANT

KEY BENEFITS

- Slim design – low profile
- High CV product (2 µF to 100 µF; 500 V to 1000 V)
- Long useful life time (> 100 000 h, at U_{NDC} and 70 °C)
- High ripple current capabilities (up to 17.5 A), low ESR (3.5 mΩ), low ESL (< 1 nH per mm lead spacing)
- Operating temperature up to 105 °C

APPLICATIONS

- Renewable energy sources such as solar micro-inverters
- On-board chargers for hybrid electrical vehicles
- Battery chargers for electrical vehicles
- LED street lighting

RESOURCES

- Datasheet: MKP1848S DC-Link - http://www.vishay.com/doc?26010
- For technical questions contact dc-film@vishay.com

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FEATURES
Low height: 12/15/18/24 (mm)

REFERENCE STANDARDS
IEC 61071, IEC 60068

RATED CAPACITANCE
2 µF to 100 µF

CAPACITANCE TOLERANCE
± 5 %

MAXIMUM APPLICABLE PEAK TO PEAK RIPPLE VOLTAGE
0.2 x U_{NDC}

SELF INDUCTANCE (LS)
< 1 nH per mm of lead spacing

RATED TEMPERATURE
85 °C

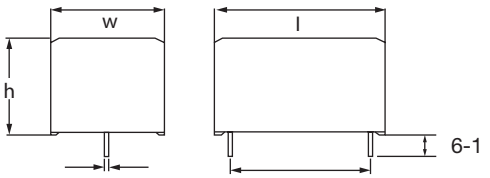
MAXIMUM PERMISSIBLE CASE TEMPERATURE
105 °C, observing voltage derating

LIFE TIME EXPECTANCY
Useful life time: > 100.000 h at U_{NDC} and 70 °C

FIT: < 10 x 10^{-9}/h (10 per 10^9 component hours) at 0.5 x U_{NDC}, 40 °C

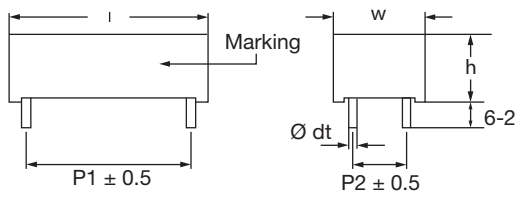
RANGE

	HEIGHT (mm)	PITCH (mm)	C (uF)									
			2	3	5	7	10	15	20	30	50	100
500 V_{NDC} @ 85 °C **600 V_{OPDC} @ 75 °C** **350 V_{OPDC} @ 105 °C**	12 and 15	27.5										
		37.5										
		52.5										
	18	27.5										
		37.5										
		52.5										
	24	27.5										
		37.5										
		52.5										
700 V_{NDC} @ 85 °C **800 V_{OPDC} @ 75 °C** **500 V_{OPDC} @ 105 °C**	12 and 15	27.5										
		37.5										
		52.5										
	18	27.5										
		37.5										
		52.5										
	24	27.5										
		37.5										
		52.5										
1000 V_{NDC} @ 85 °C **1200 V_{OPDC} @ 75 °C** **750 V_{OPDC} @ 105 °C**	12 and 15	27.5										
		37.5										
		52.5										
	18	27.5										
		37.5										
		52.5										
	24	27.5										
		37.5										
		52.5										



P1 ± 0.4 - PCM 27.5 mm
P1 ± 0.5 - PCM ≥ 37.5 mm

Ø dt ± 10 % of standard diameter specified



Dimensions in mm

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