



FILM CAPACITORS

MKP1848S DC-Link



Slim Film Capacitors for Mid-Power Electronics



RoHS
COMPLIANT

KEY BENEFITS

- Slim design – low profile
- High CV product (2 μ F to 100 μ F; 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 m Ω), 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

Capacitors - Film Capacitors with Low Profile

One of the World's Largest Manufacturers of
Discrete Semiconductors and Passive Components



FEATURES

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

REFERENCE STANDARDS

IEC 61071, IEC 60068

RATED CAPACITANCE

 2 μ F to 100 μ F

CAPACITANCE TOLERANCE
 $\pm 5 \%$
MAXIMUM APPLICABLE PEAK TO PEAK RIPPLE VOLTAGE
 $0.2 \times U_{NDC}$
SELF INDUCTANCE (LS)
 $< 1 \text{ nH per mm of lead spacing}$
RATED TEMPERATURE

85 °C

MAXIMUM PERMISSIBLE CASE TEMPERATURE

105 °C, observing voltage derating

LIFE TIME EXPECTANCY

 Useful life time: $> 100.000 \text{ h at } U_{NDC}$ and 70 °C

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

RANGE

	HEIGHT (mm)	PITCH (mm)	C (μ F)										
			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											

