

MKP1847H AC Filtering Film Capacitor Robust Design for High Humidity Environments



FEATURES

- 85 °C, 85 % relative humidity, 1000 hours at rated U_{NAC}
- Rated voltages: 250 V_{AC}, 310 V_{AC}, 350 V_{AC}, and 480 V_{AC}
- Rated capacitance range: 1 µF to 35 µF
- Segmented film
- UL 810 (electrical pending)

APPLICATIONS

- Outdoor applications inverters and converters
- High power supplies and large drives
- UPS
- Renewable energy
- Welding equipment
- AC harmonic filters

RESOURCES

- Datasheet: www.vishay.com/doc?26067
- For technical questions contact dc-film@vishay.com



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Power electronic designers are developing increasingly complex switching algorithms for pulse-width modulation (PWM) to gain efficiency and improve power quality; these designs introduce higher frequencies and harmonics, which must be filtered using LC and LCL filters at the output. The MKP1847H is designed to ensure extremely stable capacitance and ESR parameters over a long service life regardless of the environmental conditions during operation.

The MKP1847H complies with the demanding damp heat test, steady state: 85 °C, 85 % RH, 1000 hours biased at the rated AC voltage without impairing its electrical characteristics (capacitance, ESR) making it suitable for outdoor applications such as renewable energy inverters and for critical applications such as UPS used on sensitive datacenters.

VOLTAGE RATING AT 50 Hz / 60 Hz

AC VOLTAGE RATINGS (V_{RMS})				
U_{NAC}	250 V	310 V	350 V	480 V
U_{OPAC} at 85 °C	250 V	310 V	350 V	480 V
U_{OPAC} at 105 °C	175 V	210 V	240 V	330 V

RANGE

PITCH (mm)	C (µF)																CONSTRUCTION		
	1	2	3	4	5	6	7	8	10	12	15	20	22	25	30	35			
250 V _{AC}	27.5	[Green]																	MONO
	37.5								[Blue]										
	52.5											[Blue]							
310 V _{AC}	27.5	[Green]																SERIES 	
	37.5					[Blue]													
	52.5									[Blue]									
350 V _{AC}	27.5	[Green]																SERIES 	
	37.5					[Blue]													
	52.5									[Blue]									
480 V _{AC}	27.5																	SERIES 	
	37.5		[Green]																
	52.5				[Blue]														

COMPOSITION OF CATALOG NUMBER

