

⊕ Film Capacitors

X2, X1, and Y2 Capacitors,
IEC 60384-14 ed. 4 /
AMD1: Grade IIB



F340 RFI SERIES

AEC-Q200 Qualified
X2 Capacitor,
IEC 60384-14 ed. 4 /
AMD1: Grade IIB



F339 X2

AC Filter Designed for
High Robustness Under
High Humidity (THB)



MKP1847H

AEC-Q200 DC-Link
Capacitor for **High**
Robustness Under
High Humidity (THB)



MKP1848H

Snubber Capacitor for
Direct IGBT Mounting With
Configurable Terminals


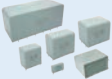





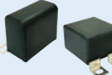

MKP386M





FILM CAPACITORS

Focus Products

DC-Link Film Capacitors								
Series	Capacitance Min. (µF)	Capacitance Max. (µF)	DC Voltage Min. (V)	DC Voltage Max. (V)	ESR Min. (mΩ)	Ripple Current Max. (A)	Pitch	
 MKP1848H	1	80	500	1200	2	22.5	27.5 mm to 52.5 mm	AEC-Q200 qualified, Vishay Automotive Grade DC-Link capacitor featuring high robustness under high humidity (85 °C, 85 % RH) for 1000 h at U _{NDC}
 MKP1848	1	400	450	1200	1.3	54	27.5 mm to 52.5 mm	AEC-Q200 qualified, Vishay Automotive Grade DC-Link capacitor
 MKP1848C	1	500	500	1200	1.5	55	27.5 mm to 52.5 mm	Industrial high-density economic pack
 MKP1848S	2	100	500	1000	2	22	27.5 mm to 52.5 mm	Slim (low building height) DC-Link capacitor
 MKP1849	500	500	500	900	0.25	140	-	AEC-Q200 qualified, Vishay Automotive Grade, DC-Link modules for eMobility. For further information contact dc-film@vishay.com


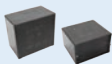



Snubber Film Capacitors								
Series	Capacitance Min. (µF)	Capacitance Max. (µF)	DC Voltage Range (V)	AC Voltage Range (V)	dV/dt Max. (V/µs)	Terminal Configurations	Dimensions Max. (mm)	
 MKP386M	0.047	10	700 to 2500	420 to 800	2500	8	35 x 50 x 58	Single metallized snubber capacitor for IGBT mounting
 MMKP386	0.1	4.7	630 to 2500	220 to 900	5500	4	30 x 46 x 44	Double metallized snubber capacitor for IGBT mounting




AC Filter								
Series	Capacitance Min. (µF)	Capacitance Max. (µF)	AC Voltage Min. (V)	AC Voltage Max. (V)	Ripple Current Min. (A)	Ripple Current Max. (A)	Pitch	
 MKP1847H	1	40	250	480	2.5	23	27.5 mm to 52.5 mm	AC filter featuring segmented film technology with high robustness under high humidity (85 °C / 85 % RH) for 1000 h at U _{RAC}
 MKP1847C	1	70	250	350	2.5	26	27.5 mm to 52.5 mm	AC filter with robustness under high humidity (40 °C, 93 % RH) for 56 days at rated voltage






FILM CAPACITORS

Focus Products

RFI X and Y Film Capacitors								
Series	Rated AC Voltage (V)	Capacitance Min. (μF)	Capacitance Max. (μF)	Rated Temperature (°C)	Construction	Agency Approvals	Pitch	
 F339X2 305 V_{AC}	305	0.1	4.7	105	Mono	IEC / EN / UL / CSA / CQC	15 mm to 27.5 mm	
THB Vishay Automotive Grade X2 class capacitor; AEC-Q200 qualified; IEC 60384-14: 2013 / AMD1: 2016 Grade IIB; 85 °C, 85 % RH, 500 h at U _{RAC} ; compliant with 85 °C, 85 % RH, 1000 h at 240 V _{AC}								
 F340X2 305 V_{AC}	305	1	20	105	Mono	IEC / EN / UL / CSA / CQC	27.5 mm to 52.5 mm	
THB interference suppression film capacitor class X2; IEC 60384-14: 2013 / AMD1: 2016 Grade IIIB; 85 °C, 85 % RH, 1000 h at U _{RAC}								
 F340Y2 305 V_{AC}	305	0.001	1	105	Series	IEC / EN / UL / CSA / CQC	7.5 mm to 37.5 mm	
THB Vishay Automotive Grade Y2 class capacitor; AEC-Q200 qualified; IEC 60384-14: 2013 / AMD1: 2016 Grade IIIB; 85 °C, 85 % RH, 1000 h at U _{RAC}								
 F340X1 480 V_{AC}	480	0.22	8.2	105	Series	IEC / EN / UL / CSA / CQC	27.5 mm to 52.5 mm	
THB interference suppression film capacitor class X1; IEC 60384-14: 2013 / AMD1: 2016 Grade IIIB; 85 °C, 85 % RH, 1000 h at U _{RAC} ; maximum applicable AC voltage is 530 V _{AC}								
 F1773X2	253	0.01	2.2	100	Series	IEC / EN / UL / CSA		
Axial X2 capacitor for low building height applications								

AC and Pulse								
Series	Capacitance Min. (μF)	Capacitance Max. (μF)	DC Voltage Range (V)	AC Voltage Range (V)	dV/dt max (V/μs)	Max. Temperature (°C)	Pitch	
 MKP385	0.00047	82	160 to 2500	110 to 900	4000	110	5 mm to 37.5 mm	
Single metallized AC and pulse capacitor								
 MKP383	0.001	4.7	250 to 2500	125 to 900	20000	105	7.5 mm to 27.5 mm	
Double metallized AC and pulse capacitor								
 MKP1839HQ	0.1	3.3	630 to 1600	300 to 450	1000	85	-	
Axial AC and pulse capacitor for low building height applications								

General Purpose Film Capacitors								
Series	Capacitance Min. (μF)	Capacitance Max. (μF)	DC Voltage Min. (V)	DC Voltage Max. (V)	Max. Temperature (°C)	Pitch		
 MKT1820	0.001	560	63	1000	125	15 mm to 52.5 mm		
AEC-Q200 qualified, Vishay Automotive Grade, featuring high temperature capabilities								
 MKT1813	0.001	22	63	1000	100	-		
Axial MKT capacitor for low building height applications								
 MKT370	0.001	1.5	63	630	105	5 mm		
AEC-Q200 qualified, Vishay Automotive Grade general-purpose capacitor								



A Complete Portfolio of Film Capacitors for Power Applications

Advantages of Vishay Film Capacitors

- High performance
- Robust design
- Customization possible

For the Following Applications

- Onboard chargers
- 48 V boardnet
- Power converters
- RFI filters

High robustness against high humidity (up to 85 °C, 85 % RH, 1000 h at U_R) portfolio capabilities



For high performance DC-Link applications, use our MKP1848 family for longer lifespan and better reliability



With our broad range of AEC-Q200 qualified standard components, Vishay is your “automotive driven” supplier

Useful Links

- Film Capacitors Selector Guide
www.vishay.com/doc?49630
- Parametric Search
www.vishay.com/capacitors/film

**AEC-Q200
QUALIFIED**

**GREEN
(5-2008)**

**HALOGEN
FREE**

A **WORLD OF**
SOLUTIONS™