



Vishay Intertechnology, Inc.

Film Capacitors

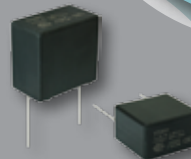
MKP339X2 and MKP3386Y2

X2 and Y2 Capacitor
AEC-Q200 Qualified,
Automotive Grade



F339X1 480 V_{AC}

X1 Capacitor for High
Capacitance Stability



MKP1847H*

AC Filter Designed
for High Robustness
Under High Humidity
(THB) *SOP: 2017



MKP1848H*

AEC-Q200 DC-Link
Capacitor for Harsh
Ambient Conditions (THB)

*SOP: 2017



MKP386M

Snubber Capacitor
for Direct IGBT
Mounting with
Configurable
Terminals










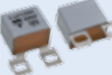
FILM CAPACITORS

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 Automotive Grade DC-link capacitor featuring high robustness against high humidity: 85 °C / 85 % RH for 1000 h at U _{NDC} (*SOP: 2017)							
 MKP1848	1	400	450	1200	1.3	54	27.5 mm to 52.5 mm
AEC-Q200 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							



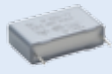

Snubber Film Capacitors

Series	Capacitance min. (μF)	Capacitance max. (μF)	DC Voltage min. to max. (V)	AC Voltage min. to max. (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 metalized snubber capacitor for IGBT mounting							
 MMKP386	0.1	4.7	630 to 2500	220 to 900	5500	4	30 x 46 x 44
Double metalized 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} (*SOP: 2017)							




RFI X and Y Film Capacitors

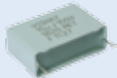


Series	Rated AC Voltage (V)	Capacitance min. (μF)	Capacitance max. (μF)	Rated Temperature (°C)	Construction	Agency Approvals	Pitch
 MKP339X2	310	0.001	4.7	110	Mono	IEC / EN / UL / CSA / CQC	7.5 mm to 27.5 mm
AEC-Q200 Automotive Grade X2 class capacitor							
 F339X1 480 V_{AC}	480	0.001	1	110	Series	IEC / EN / UL / CSA/ CQC	10 mm to 27.5 mm
X1 capacitor for high capacitance stability; 85 °C / 85 % RH, 400 V _{AC} for 500 h							
 MKP3386Y2	300	0.001	0.47	105	Series	IEC / EN / UL / CSA	7.5 mm to 27.5 mm
AEC-Q200 Automotive Grade Y2 class capacitor							
 F1773X2	253	0.01	2.2	100	Series	IEC / EN / UL / CSA	-
Axial X2 capacitor for low building height applications							



FILM CAPACITORS

Focus Products

AC and Pulse								
Series	Capacitance min. (μF)	Capacitance max. (μF)	DC Voltage min. to max. (V)	AC Voltage min. to max. (V)	dV/dt max ($\text{V}/\mu\text{s}$)	Max. Temperature ($^{\circ}\text{C}$)	Pitch	
 MKP385	0.00047	82	160 to 2500	110 to 900	4000	110	5 mm to 37.5 mm	
Single metalized AC and pulse capacitor								
 MMKP383	0.001	4.7	250 to 2500	125 to 900	20000	105	7.5 mm to 27.5 mm	
Double metalized 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 ($^{\circ}\text{C}$)	Pitch	
 MKT1820	0.001	560	63	1000	125	15 mm to 52.5 mm	
AEC-Q200 Automotive Grade, featuring high-temperature capabilities							
 MKT1813	0.001	22	63	1000	100	-	
Axial MKT capacitor for low building height applications							
 MKT37x	0.001	15	63	630	105	5 mm to 27.5 mm	
AEC-Q200 Automotive Grade general-purpose capacitor							

A COMPLETE PORTFOLIO OF FILM CAPACITORS FOR POWER APPLICATIONS

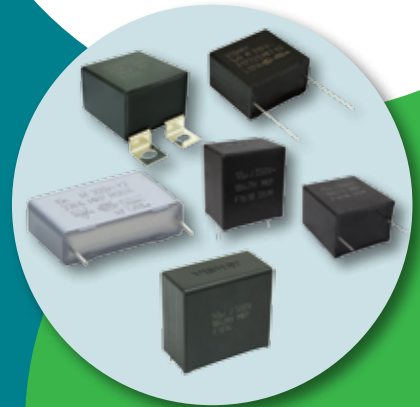


Advantages of Vishay Film Capacitors

- High performance
- Robust design
- Customization possible

For the Following Applications

- On-board chargers
- 48 V board net
- Power converters
- RFI filters



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



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



Useful Links

Film Capacitors

- Selector guide
www.vishay.com/doc?49630
- Parametric search
www.vishay.com/film-capacitors/param

**AEC-Q200
QUALIFIED**

**GREEN
(5-2008)**

**HALOGEN
FREE**

A **WORLD OF
SOLUTIONS**