



# Overview

X/Y capacitors are used in mains-connected applications to minimize the amount of conducted common mode and differential mode electromagnetic interference present in many electrical devices.

## Electrical Characteristics

- 300 to 760 VAC Operating Voltage
- 100pF to 10µF
- UL/ENEC/CQC Certified
- Halogen Free option available

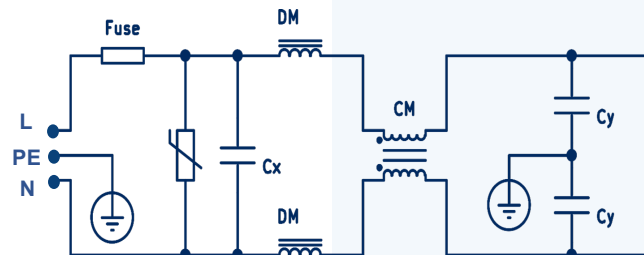
## Product Highlights

- **F862-V054, X2 310 VAC, Harsh Environment, AEC-Q200**  
Grade IIB, 85°C/85% R.H., 500 h at 310 VAC
- **R41T Series Y2/X1 125 °C, Harsh Environment, AEC-Q200**  
Grade IIIB, 85°C/85% RH, 1,000 h at 300 VAC and 1,500 VDC
- **SMP253, Y2, SMD, 250 VAC Impregnated Paper**  
UL/ENEC Certified, High Reliability, stability and dV/dt

Rating	Operational Environment	Impulse
X1	Peak Voltage Pulse 4 kV per C ≤ 1 µF	> 2.5 kV
X2	Peak Voltage Pulse 4/√C kV per C > 1 µF < 2.5 kV	≤ 4.0 kV
Y1	Peak Voltage Pulse Rated Voltage 150 V ≤ VAC < 300 V	2.5 kV per C ≤ 1 µF 2.5/√C kV per C > 1 µF
Y2	Rated Voltage ≤ 500 VAC	5 kV 8 kV

## Typical EMI Application

- Line-to-line (X rated) differential mode (DM) filtering
- Line-to-ground (Y rated) common mode (CM) filtering
- Capacitive Power Supplies
- Power Line Communication (PLC)

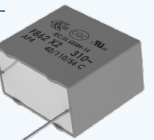
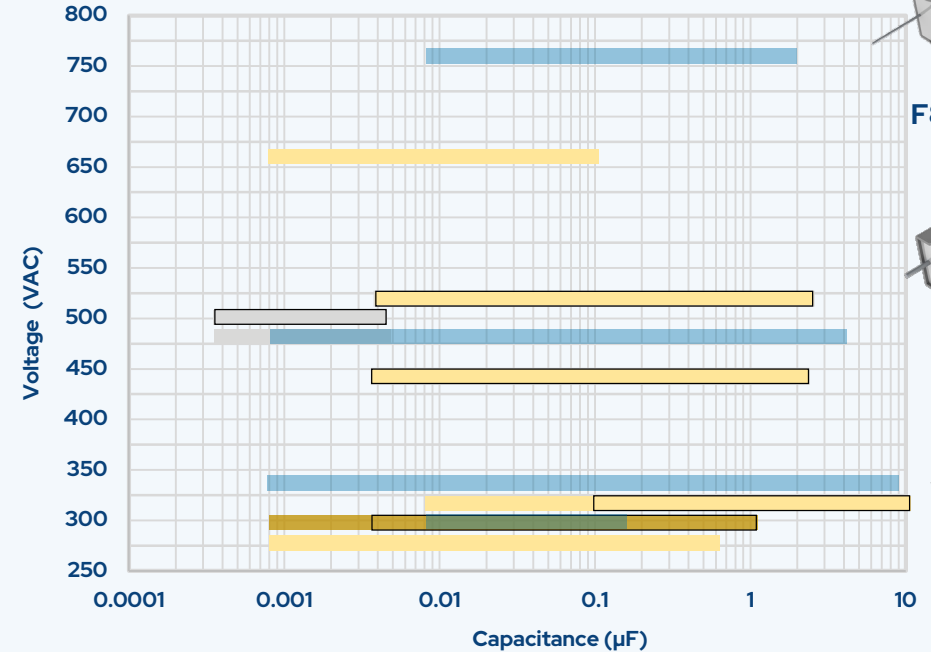


## Product Selection

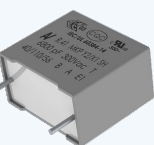
- X1
- X2
- Y1
- Y2
- AEC-Q200



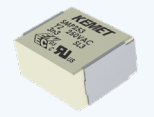
# METALLIZED POLYPROPYLENE & PAPER Film Safety Capacitors



F862-V054 X2



R41T Y2/X1



SMP253 Y2

## Series Options

X1	
R47 <sup>1</sup>	440 VAC +110 °C
R49	330 VAC +110 °C
PHE844	480 VAC +105 °C
PHE845	760 VAC +105 °C
F871	330 VAC +110 °C
F872	480 VAC +110 °C
F873	760 VAC +110 °C
P278	480 VAC +110 °C
PME271E	300 VAC +110 °C

X2	
R46	310 VAC +110 °C
R46 125 °C	275 VAC +125 °C
R47 <sup>1</sup>	520 VAC +110 °C
F861	310 VAC +110 °C
F862-V054 <sup>1</sup>	310 VAC +110 °C
F863 <sup>1</sup>	310 VAC +110 °C
PME264	660 VAC +85 °C
PME271M	275 VAC +110 °C

Y1	
P295 <sup>1</sup>	500 VAC +115 °C
PME295	480 VAC +115 °C

Y2	
SMP253 <sup>2</sup>	250 VAC +100 °C
PME271Y	300 VAC +115 °C
F881	300 VAC +110 °C

Y2 / X1	
R41	300 VAC +110 °C
R41T <sup>1</sup>	300 VAC +125 °C

<sup>1</sup> AEC-Q200 Certified

<sup>2</sup> Impregnated Paper SMD