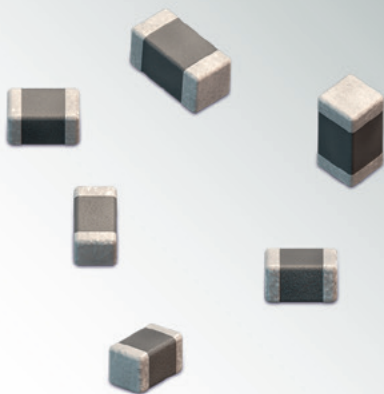




# DESIGN KIT

## WCAP-CSMH

### Mid and High Voltage MLCC



#### SIZE:

0805 / 1206 / 1210 / 1808 / 1812

#### TECHNICAL DATA:

Capacitance Range: 10 pF – 22 nF

Rated Voltage: 1 kV<sub>DC</sub> – 3 kV<sub>DC</sub>

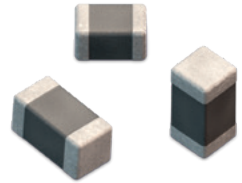
Dielectrics: NPO / X7R

Termination: Cu / Ni / Sn

**Order Code 885 342**

**Version 1.1**

# DESIGN KIT WCAP-CSMH Mid and High Voltage MLCC



<b>0805</b> <b>885 342 207 015</b> <b>1 kV<sub>DC</sub></b> <b>100 pF; ±10 %;</b> <b>H = 1.25 mm;</b> <b>DF ≤ 2.5 %; IR ≥ 10 GΩ</b>	<b>1206</b> <b>885 342 208 016</b> <b>1 kV<sub>DC</sub></b> <b>150 pF; ±10 %;</b> <b>H = 1.25 mm;</b> <b>DF ≤ 2.5 %; IR ≥ 10 GΩ</b>	<b>1206</b> <b>885 342 208 022</b> <b>2 kV<sub>DC</sub></b> <b>100 pF; ±10 %;</b> <b>H = 1.25 mm;</b> <b>DF ≤ 2.5 %; IR ≥ 10 GΩ</b>	<b>1210</b> <b>885 342 009 005</b> <b>2 kV<sub>DC</sub></b> <b>220 pF; ±5 %;</b> <b>H = 1.6 mm; Q ≥ 1000;</b> <b>IR ≥ 10 GΩ</b>	<b>1808</b> <b>885 342 010 002</b> <b>3 kV<sub>DC</sub></b> <b>68 pF; ±5 %;</b> <b>H = 1.25 mm; Q ≥ 1000;</b> <b>IR ≥ 10 GΩ</b>	<b>1812</b> <b>885 342 011 002</b> <b>1 kV<sub>DC</sub></b> <b>100 pF; ±5 %;</b> <b>H = 1.25 mm; Q ≥ 1000;</b> <b>IR ≥ 10 GΩ</b>
<b>885 342 207 016</b> <b>1 kV<sub>DC</sub></b> <b>2.2 nF; ±10 %;</b> <b>H = 1.25 mm;</b> <b>DF ≤ 2.5 %; IR ≥ 10 GΩ</b>	<b>885 342 208 017</b> <b>1 kV<sub>DC</sub></b> <b>470 pF; ±10 %;</b> <b>H = 1.25 mm;</b> <b>DF ≤ 2.5 %; IR ≥ 10 GΩ</b>	<b>885 342 208 023</b> <b>2 kV<sub>DC</sub></b> <b>470 pF; ±10 %;</b> <b>H = 1.25 mm;</b> <b>DF ≤ 2.5 %; IR ≥ 10 GΩ</b>	<b>885 342 209 006</b> <b>1 kV<sub>DC</sub></b> <b>1 nF; ±10 %;</b> <b>H = 1.25 mm;</b> <b>DF ≤ 2.5 %; IR ≥ 10 GΩ</b>	<b>885 342 010 003</b> <b>3 kV<sub>DC</sub></b> <b>100 pF; ±5 %;</b> <b>H = 2 mm; Q ≥ 1000;</b> <b>IR ≥ 10 GΩ</b>	<b>885 342 011 003</b> <b>1 kV<sub>DC</sub></b> <b>1.5 nF; ±5 %;</b> <b>H = 2 mm; Q ≥ 1000;</b> <b>IR ≥ 10 GΩ</b>
<b>1206</b> <b>885 342 008 008</b> <b>1 kV<sub>DC</sub></b> <b>22 pF; ±5 %; H = 0.8 mm</b> <b>Q ≥ 400 + 20C; IR ≥ 10 GΩ</b>	<b>885 342 208 018</b> <b>1 kV<sub>DC</sub></b> <b>1 nF; ±10 %;</b> <b>H = 1.25 mm;</b> <b>DF ≤ 2.5 %; IR ≥ 10 GΩ</b>	<b>885 342 208 024</b> <b>2 kV<sub>DC</sub></b> <b>1 nF; ±10 %;</b> <b>H = 1.6 mm;</b> <b>DF ≤ 2.5 %; IR ≥ 10 GΩ</b>	<b>885 342 209 007</b> <b>1 kV<sub>DC</sub></b> <b>22 nF; ±10 %;</b> <b>H = 1.6 mm; DF ≤ 2.5 %;</b> <b>IR ≥ 4.55 GΩ</b>	<b>885 342 210 001</b> <b>2 kV<sub>DC</sub></b> <b>1 nF; ±10 %;</b> <b>H = 1.25 mm;</b> <b>DF ≤ 2.5 %; IR ≥ 10 GΩ</b>	<b>885 342 211 007</b> <b>2 kV<sub>DC</sub></b> <b>2.2 nF; ±10 %;</b> <b>H = 1.6 mm;</b> <b>DF ≤ 2.5 %; IR ≥ 10 GΩ</b>
<b>885 342 008 009</b> <b>1 kV<sub>DC</sub></b> <b>100 pF; ±5 %;</b> <b>H = 1.25 mm; Q ≥ 1000;</b> <b>IR ≥ 10 GΩ</b>	<b>885 342 208 019</b> <b>1 kV<sub>DC</sub></b> <b>2.2 nF; ±10 %;</b> <b>H = 1.25 mm;</b> <b>DF ≤ 2.5 %; IR ≥ 10 GΩ</b>	<b>1210</b> <b>885 342 009 002</b> <b>1 kV<sub>DC</sub></b> <b>22 pF; ±5 %; H = 0.95 mm</b> <b>Q ≥ 400 + 20C; IR ≥ 10 GΩ</b>	<b>885 342 209 008</b> <b>2 kV<sub>DC</sub></b> <b>220 pF; ±10 %;</b> <b>H = 1.25 mm;</b> <b>DF ≤ 2.5 %; IR ≥ 10 GΩ</b>	<b>885 342 210 002</b> <b>2 kV<sub>DC</sub></b> <b>2.2 nF; ±10 %;</b> <b>H = 2 mm; DF ≤ 2.5 %;</b> <b>IR ≥ 10 GΩ</b>	<b>885 342 211 008</b> <b>2 kV<sub>DC</sub></b> <b>4.7 nF; ±10 %;</b> <b>H = 2 mm; DF ≤ 2.5 %;</b> <b>IR ≥ 10 GΩ</b>
<b>885 342 008 010</b> <b>2 kV<sub>DC</sub></b> <b>68 pF; ±5 %;</b> <b>H = 1.25 mm; Q ≥ 1000;</b> <b>IR ≥ 10 GΩ</b>	<b>885 342 208 020</b> <b>1 kV<sub>DC</sub></b> <b>4.7 nF; ±10 %;</b> <b>H = 1.25 mm;</b> <b>DF ≤ 2.5 %; IR ≥ 10 GΩ</b>	<b>885 342 009 003</b> <b>1 kV<sub>DC</sub></b> <b>1 nF; ±5 %;</b> <b>H = 1.6 mm; Q ≥ 1000;</b> <b>IR ≥ 10 GΩ</b>	<b>885 342 209 009</b> <b>2 kV<sub>DC</sub></b> <b>1 nF; ±10 %;</b> <b>H = 1.25 mm;</b> <b>DF ≤ 2.5 %; IR ≥ 10 GΩ</b>	<b>885 342 210 003</b> <b>3 kV<sub>DC</sub></b> <b>470 pF; ±10 %;</b> <b>H = 2 mm; DF ≤ 2.5 %;</b> <b>IR ≥ 10 GΩ</b>	<b>885 342 211 009</b> <b>3 kV<sub>DC</sub></b> <b>1 nF; ±10 %;</b> <b>H = 2 mm; DF ≤ 2.5 %;</b> <b>IR ≥ 10 GΩ</b>
<b>885 342 008 011</b> <b>2 kV<sub>DC</sub></b> <b>100 pF; ±5 %;</b> <b>H = 1.25 mm; Q ≥ 1000;</b> <b>IR ≥ 10 GΩ</b>	<b>885 342 208 021</b> <b>1 kV<sub>DC</sub></b> <b>10 nF; ±10 %;</b> <b>H = 1.25 mm;</b> <b>DF ≤ 2.5 %; IR ≥ 10 GΩ</b>	<b>885 342 009 004</b> <b>2 kV<sub>DC</sub></b> <b>10 pF; ±5 %;</b> <b>H = 0.95 mm; Q ≥ 600;</b> <b>IR ≥ 10 GΩ</b>	<b>1808</b> <b>885 342 010 001</b> <b>3 kV<sub>DC</sub></b> <b>10 pF; ±5 %; H = 1.25 mm;</b> <b>Q ≥ 400 + 20C; IR ≥ 10 GΩ</b>	<b>885 342 210 004</b> <b>3 kV<sub>DC</sub></b> <b>1 nF; ±10 %;</b> <b>H = 2 mm; DF ≤ 2.5 %;</b> <b>IR ≥ 10 GΩ</b>	<b>885 342 211 010</b> <b>3 kV<sub>DC</sub></b> <b>2.2 nF; ±10 %;</b> <b>H = 2.5 mm;</b> <b>DF ≤ 2.5 %; IR ≥ 10 GΩ</b>

Ceramic	Capacitance Characteristics*
NPO	±30 ppm / ±0.54 %
X7R	±15 %

\* within Operating Temperature Range

## Technical Data:

Operating Temperature: -55 °C to +125 °C

Termination: Cu / Ni / Sn

H = Thickness



**Important information:** Würth Elektronik's design kits contain reference components. These components correspond with the current product development status on the day of supply. Exchange of the reference components to components with up-to-date product development status is not carried out automatically. No liability is taken for the use of these reference components. Therefore, please request new samples prior to releases for series production and product release.

**All products  
ex stock!**

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