



# DESIGN KIT

## WE-VD Disk Varistor



**Our varistors  
are free of  
halogens!**



### SIZE:

5 mm ~ 20 mm

### TECHNICAL DATA:

$V_{RMS}^*$ : 25 V ~ 680 V  
 $V_{DC}^*$ : 31 V ~ 895 V  
 $I_{peak}^*$ : 100 A ~ 10 000 A  
 $W_{max}^*$ : 1.2 J ~ 620 J

Approved according to UL 1414, UL1449 3rd,  
CSA, VDE and IEC60950 Annex Q

**Order Code 820 999**  
**Version 2.0**

# WE-VD Disk Varistor



5 mm / 7 mm	
<b>820 552 501</b>	
$V_{RMS} / V_{DC}$	25 V / 31 V
$I_{peak}$	100 A
$W_{max}$	1.2 J
Cert <sub>UL1449</sub>	Other
UL1449 <sub>VPR</sub>	330 V

10 mm	
<b>820 412 001</b>	
$V_{RMS} / V_{DC}$	20 V / 26 V
$I_{peak}$	1000 A
$W_{max}$	4.8 J
Cert <sub>UL1449</sub>	Other
UL1449 <sub>VPR</sub>	330 V

14 mm	
<b>820 542 501</b>	
$V_{RMS} / V_{DC}$	25 V / 31 V
$I_{peak}$	1000 A
$W_{max}$	9.4 J
Cert <sub>UL1449</sub>	Other
UL1449 <sub>VPR</sub>	330 V

20 mm	
<b>820 443 211E</b>	
$V_{RMS} / V_{DC}$	320 V / 418 V
$I_{peak}$	6000 A
$W_{max}$	190 J
Cert <sub>UL1449</sub>	Type 2
UL1449 <sub>VPR</sub>	1200 V

20 mm	
<b>820 423 211</b>	
$V_{RMS} / V_{DC}$	320 V / 418 V
$I_{peak}$	10000 A
$W_{max}$	382 J
Cert <sub>UL1449</sub>	Type 2
UL1449 <sub>VPR</sub>	1500 V

<b>820 574 001</b>	
$V_{RMS} / V_{DC}$	40 V / 56 V
$I_{peak}$	250 A
$W_{max}$	4.3 J
Cert <sub>UL1449</sub>	Other
UL1449 <sub>VPR</sub>	330 V

<b>820 411 311</b>	
$V_{RMS} / V_{DC}$	130 V / 170 V
$I_{peak}$	3500 A
$W_{max}$	35 J
Cert <sub>UL1449</sub>	Type 3
UL1449 <sub>VPR</sub>	500 V

<b>820 441 311E</b>	
$V_{RMS} / V_{DC}$	130 V / 170 V
$I_{peak}$	6000 A
$W_{max}$	70 J
Cert <sub>UL1449</sub>	Type 2
UL1449 <sub>VPR</sub>	800 V

<b>820 444 611E</b>	
$V_{RMS} / V_{DC}$	460 V / 615 V
$I_{peak}$	6000A
$W_{max}$	230 J
Cert <sub>UL1449</sub>	Type 2
UL1449 <sub>VPR</sub>	2000 V

<b>820 425 511</b>	
$V_{RMS} / V_{DC}$	550 V / 745 V
$I_{peak}$	10000 A
$W_{max}$	510 J
Cert <sub>UL1449</sub>	Type 2
UL1449 <sub>VPR</sub>	4000 V

<b>820 572 711</b>	
$V_{RMS} / V_{DC}$	275 V / 350 V
$I_{peak}$	1200 A
$W_{max}$	33 J
Cert <sub>UL1449</sub>	Other
UL1449 <sub>VPR</sub>	1000 V

<b>820 412 711</b>	
$V_{RMS} / V_{DC}$	275 V / 350 V
$I_{peak}$	3500 A
$W_{max}$	80 J
Cert <sub>UL1449</sub>	Type 3
UL1449 <sub>VPR</sub>	900 V

<b>820 442 711E</b>	
$V_{RMS} / V_{DC}$	275 V / 350 V
$I_{peak}$	6000 A
$W_{max}$	155 J
Cert <sub>UL1449</sub>	Type 2
UL1449 <sub>VPR</sub>	1200 V

<b>820 445 511E</b>	
$V_{RMS} / V_{DC}$	550 V / 745 V
$I_{peak}$	6000 A
$W_{max}$	255 J
Cert <sub>UL1449</sub>	Type 2
UL1449 <sub>VPR</sub>	2000 V

<b>820 426 811</b>	
$V_{RMS} / V_{DC}$	680 V / 895 V
$I_{peak}$	10000 A
$W_{max}$	620 J
Cert <sub>UL1449</sub>	Type 2
UL1449 <sub>VPR</sub>	4000 V



UL 1414  
File No E345659  
UL1449 3rd  
File No E332875



File 40016986  
incl. IEC60950 Annex Q  
File 40016998  
incl. IEC60950 Annex Q



CSA 2221-01  
File 224856



For use in Type X SPD Applications  
according to UL1449 3rd ed.



Voltage Protection Rating at 6 kV/3 kA  
or nominal discharge current



Approved according to IEC60950 Annex Q  
for use in Europe / Japan / USA

**Our varistors are  
free of halogens!**



EMC COMPONENTS | INDUCTORS | TRANSFORMERS | RF COMPONENTS | CIRCUIT PROTECTION | EMC SHIELDING MATERIAL | CONNECTORS | SWITCHES | ASSEMBLY TECHNIQUE | POWER ELEMENTS

**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.

Please check datasheets on [www.we-online.com](http://www.we-online.com) for specifications. Würth Elektronik eiSos GmbH & Co. KG, EMC & Inductive Solutions. © 2011

[www.we-online.com](http://www.we-online.com)

**All products  
ex stock!**