

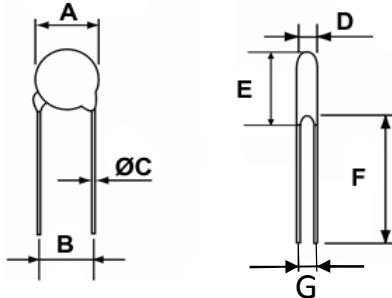
# Specification for Release

Customer : \_\_\_\_\_  
 Ordercode: **820444611E**  
 Description : **Disk Varistor HighSurge WE-VD**



DATE : 2010-04-19

## A Dimensions:



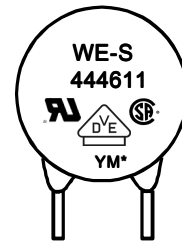
	Diameter 14mm	
A	16.5 max.	mm
B	7.5 ± 1.0	mm
C	0.8 ± 0.05	mm
D	6.0 typ.	mm
D	8.6 max.	mm
E	20.5 max.	mm
F	25.0 min.	mm
G	4.3 ± 1.0	mm

## B Electrical properties:

Properties	Test Conditions		Value	Unit	Tol.
max. AC Operating Voltage		$V_{RMS}$	<b>460</b>	V	<b>max</b>
max. DC Operating Voltage		$V_{DC}$	<b>615</b>	V	<b>max</b>
Withstanding Surge Current	<b>8/20µs</b>	$i_{max}$	<b>6000</b>	A	<b>max</b>
max. Energy	<b>10/1000µs</b>	$W_{max}$	<b>230.0</b>	J	<b>max</b>
Rated Power	<b>Continuous</b>	$P_{max}$	<b>0.6</b>	W	<b>max</b>
Varistor Voltage	<b>1mA</b>	$V_{Var}$	<b>750</b>	V	<b>±10%</b>
max. Clamping Voltage	<b>50A @ 8/20µs</b>	$V_{Cl}$	<b>1240</b>	V	<b>max</b>
Capacitance	<b>1 kHz</b>	$C_P$	<b>270</b>	pF	<b>typ</b>
Voltage Protection Rating	<b>6000 / 3000</b>	V / A	<b>2000</b>	V	<b>max</b>

## C Body marking:

WESURGE from Würth Elektronik  
 Part Branding (digit 4-9 of ordercode)  
 Approvals (see F)  
 Date Code & Internal Symbol



## D Test equipment:

**Keithley 2410** for Varistor Voltage  
**EMC Partner MIG0603CLV2** for Clamping Voltage  
**EMC Partner MIG0624LP1** for max. Surge Current and Energy  
**Agilent E4980A LCR Meter** for Capacitance

## E Test conditions:

Humidity: 33%  
 Temperature: +25°C

## F Material & approvals:

Body Insulation: 2500Vrms Withstanding Voltage  
 Coating: Epoxy, UL 94V-0, halogen free  
 Approvals: UL1449 3rd (E332875) for use in Type 2 SPD  
 VDE (40016998) & IEC 60950-1 Annex Q  
 CSA (224856)

## G General specifications:

Storage Temperature: -20°C ... + 60°C  
 Max. Operating Temperature: -40°C ... +125°C  
 Max. Ambient Temperature: -40°C ... +115°C  
 Max. Response Time: 25ns

General Release:		Customer			
.....		.....			
Date	.....	Signature			
		<b>Würth Elektronik</b>			
.....		.....			
Checked	.....	Approved		JB	Version 1
				Name	Modification
				Date	

## Würth Elektronik eiSos GmbH & Co. KG

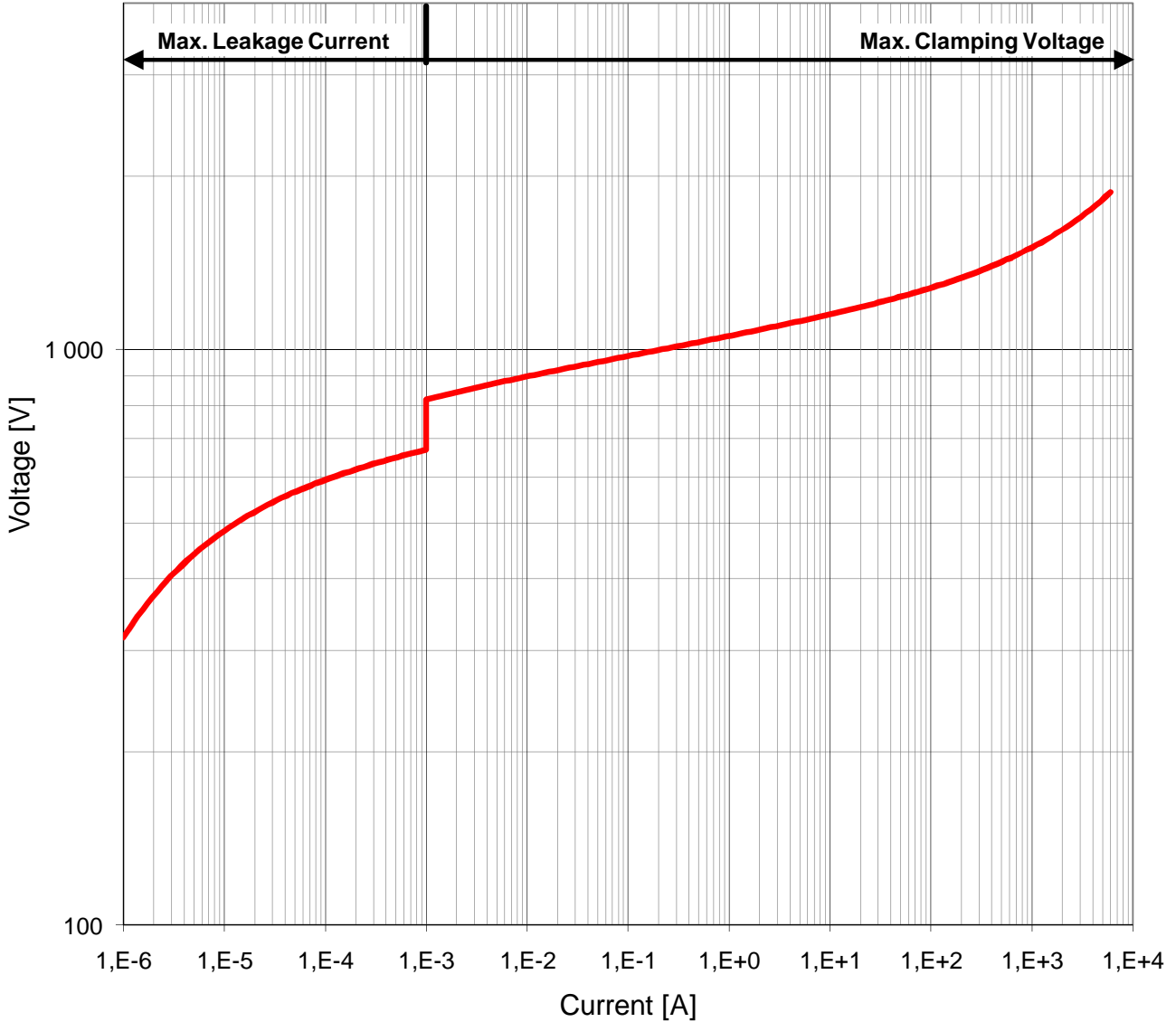
# Specification for Release

Customer : \_\_\_\_\_  
 Ordercode: **820444611E**  
 Description : **Disk Varistor HighSurge WE-VD**



DATE : 2010-04-19

## H Typical I/V Characteristic:



General Release:	<b>Customer</b>			
.....	.....			
Date	Signature			
	<b>Würth Elektronik</b>			
.....	.....			
Checked	Approved	JB	Version 1	2010-04-19
		Name	Modification	Date

This electronic component has been designed and developed for usage in general electronic equipment. Before incorporating this component into any equipment where higher safety and reliability is especially required or if there is the possibility of direct damage or injury to human body, for example in the range of aerospace, aviation, nuclear control, submarine, transportation, (automotive control, train control, ship control), transportation signal, disaster prevention, medical, public information network etc, Würth Elektronik eiSos GmbH must be informed before the design-in stage. In addition, sufficient reliability evaluation checks for safety must be performed on every electronic component which is used in electrical circuits that require high safety and reliability functions or performance.

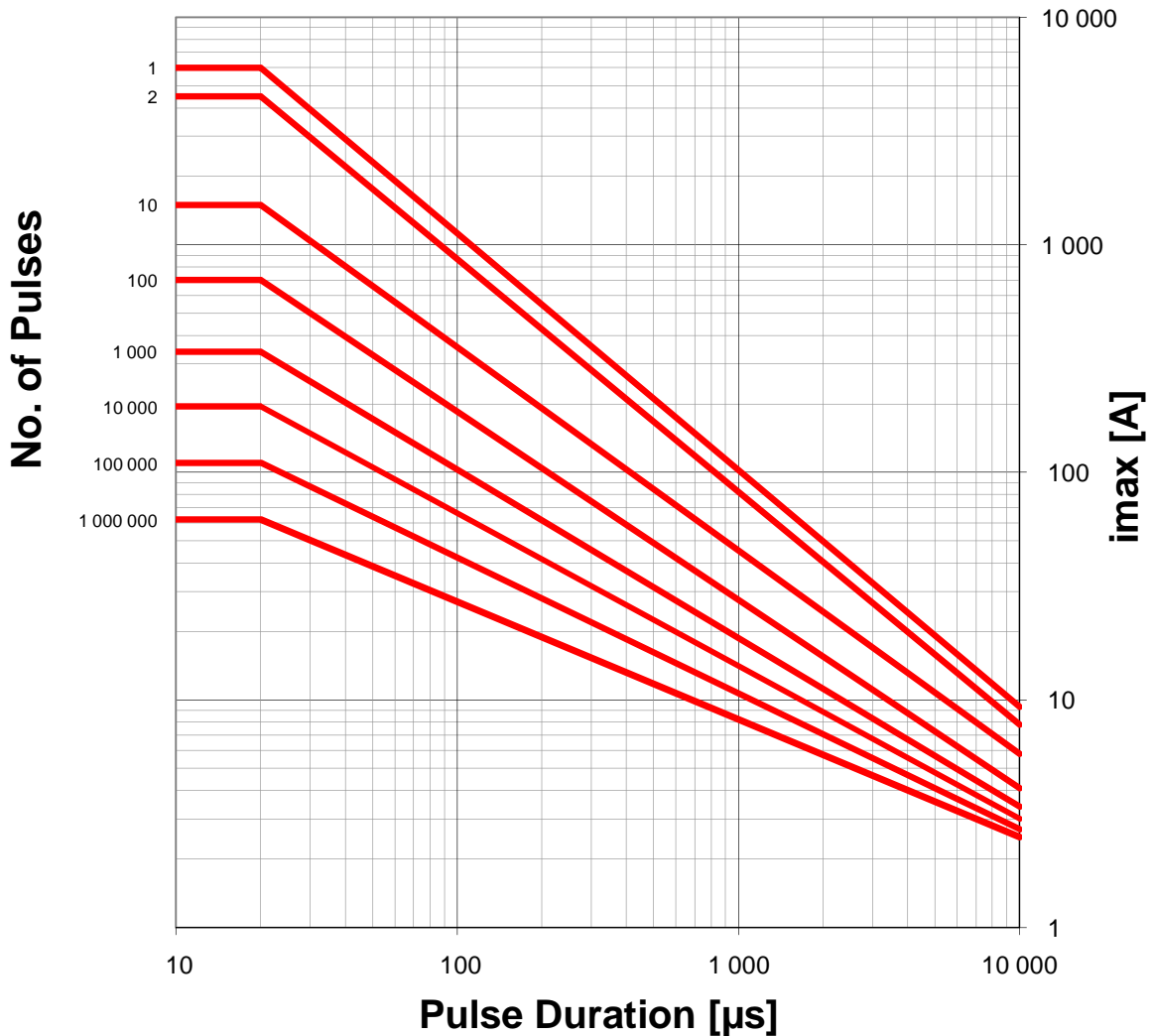
### Würth Elektronik eiSos GmbH & Co. KG

# Specification for Release

Customer : \_\_\_\_\_  
 Ordercode: **820444611E**  
 Description : **Disk Varistor HighSurge WE-VD**



## I Typical Pulse Lifetime Derating:



**Note:**

Varistors do not have an endless lifetime. Also a well dimensioned varistor may fail due to enormous overload. This will result in heating, smoke emission and / or disposure of varistor itself. Therefore we recommend to place varistors separate within a box on PCB. Furthermore a fuse should be in the varistor's current path to avoid secondary current in case the varistor fails. This fuse can protect against secondary currents and therewith caused damages.

General Release:	Customer			
.....	.....			
Date	Signature			
	Würth Elektronik			
.....	.....			
Checked	Approved	JB	Version 1	2010-04-19
		Name	Modification	Date

This electronic component has been designed and developed for usage in general electronic equipment. Before incorporating this component into any equipment where higher safety and reliability is especially required or if there is the possibility of direct damage or injury to human body, for example in the range of aerospace, aviation, nuclear control, submarine, transportation, (automotive control, train control, ship control), transportation signal, disaster prevention, medical, public information network etc, Würth Elektronik eiSos GmbH must be informed before the design-in stage. In addition, sufficient reliability evaluation checks for safety must be performed on every electronic component which is used in electrical circuits that require high safety and reliability functions or performance.

### Würth Elektronik eiSos GmbH & Co. KG

D-74638 Waldenburg · Max-Eyth-Strasse 1 · Germany · Phone (+49) (0) 7942 - 945 - 0 · Fax (+49) (0) 7942 - 945 - 400

<http://www.we-online.com>



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.