Specification for Release

Customer :

Ordercode: **820444211E**

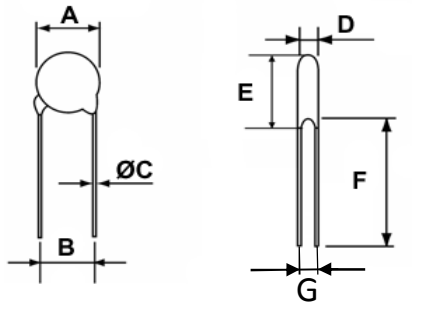
Description : **Disk Varistor HighSurge WE-VD**

COMPLIANT RoHS&REACh WÜRTH ELEKTRONIK

WÜRTH ELEKTRONIK

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	**5.7 typ.**	mm
D	**8.2 max.**	mm
E	**20.5 max.**	mm
F	**25.0 min.**	mm
G	**4.1 ± 1.0**	mm

B Electrical properties:

Properties	Test Conditions		Value	Unit	Tol.
max. AC Operating Voltage		V_{RMS}	**420**	V	**max**
max. DC Operating Voltage		V_{DC}	**560**	V	**max**
Withstanding Surge Current	**8/20µs**	i_{max}	**6000**	A	**max**
max. Energy	**10/1000µs**	W_{max}	**225.0**	J	**max**
Rated Power	**Continuous**	P_{max}	**0.6**	W	**max**
Varistor Voltage	**1mA**	V_{Var}	**680**	V	**±10%**
max. Clamping Voltage	**50A @ 8/20µs**	v_{Cl}	**1120**	V	**max**
Capacitance	**1 kHz**	C_P	**290**	pF	**typ**
Voltage Protection Rating	**6000 / 3000**	V / A	**1500**	V	**max**

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℃

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℃ ... + 60℃
Max. Operating Temperature:	-40℃ ... +125℃
Max. Ambient Temperature:	-40℃ ... +115℃
Max. Response Time:	25ns

General Release:

Customer		
Date	Signature	
Würth Elektronik		
Checked	Approved	

JB	Version 1	2010-04-19
Name	**Modification**	Date

Würth Elektronik eiSos GmbH & Co. KG

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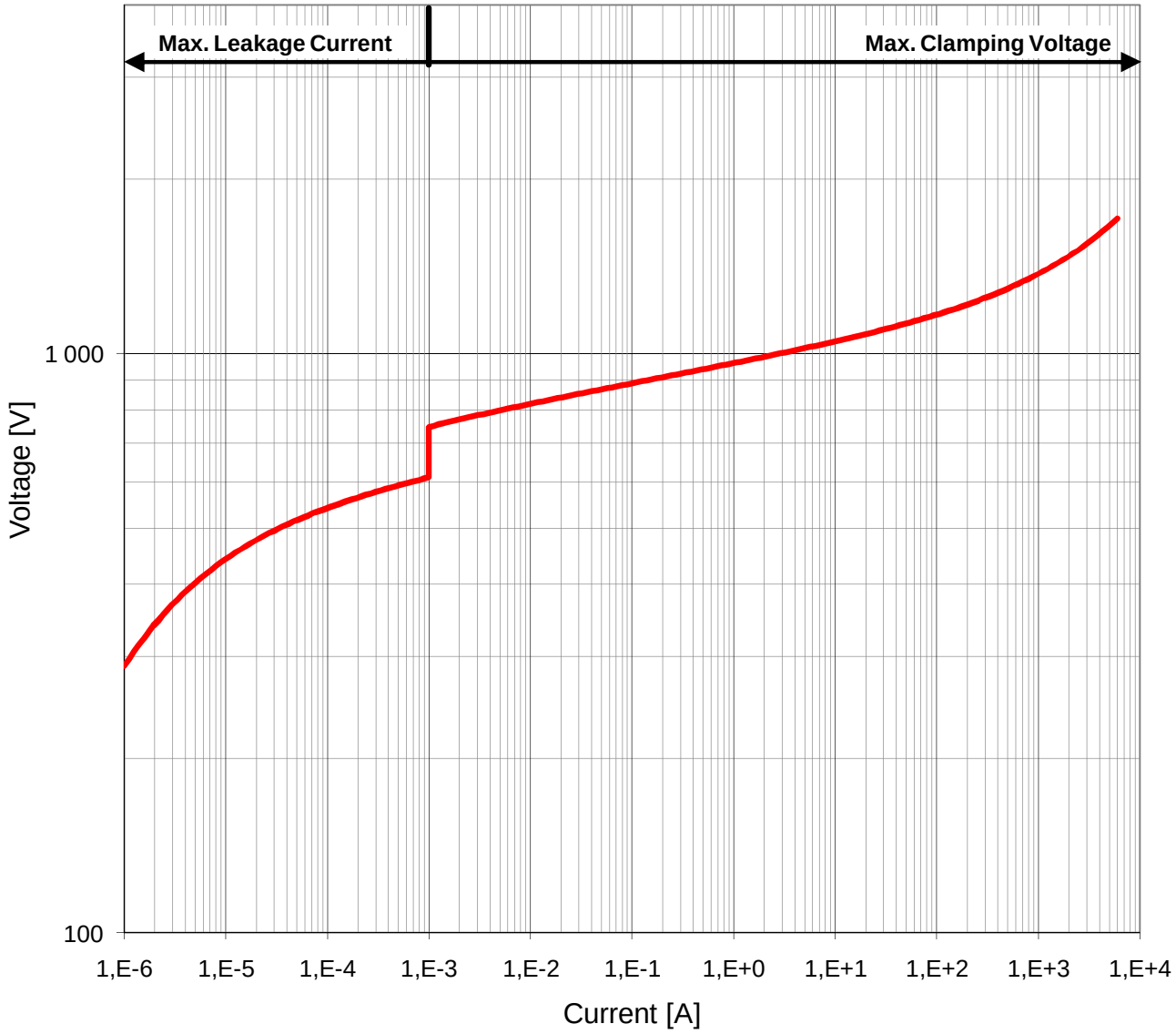
Description : **Disk Varistor HighSurge WE-VD**

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H Typical I/V Characteristic:



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

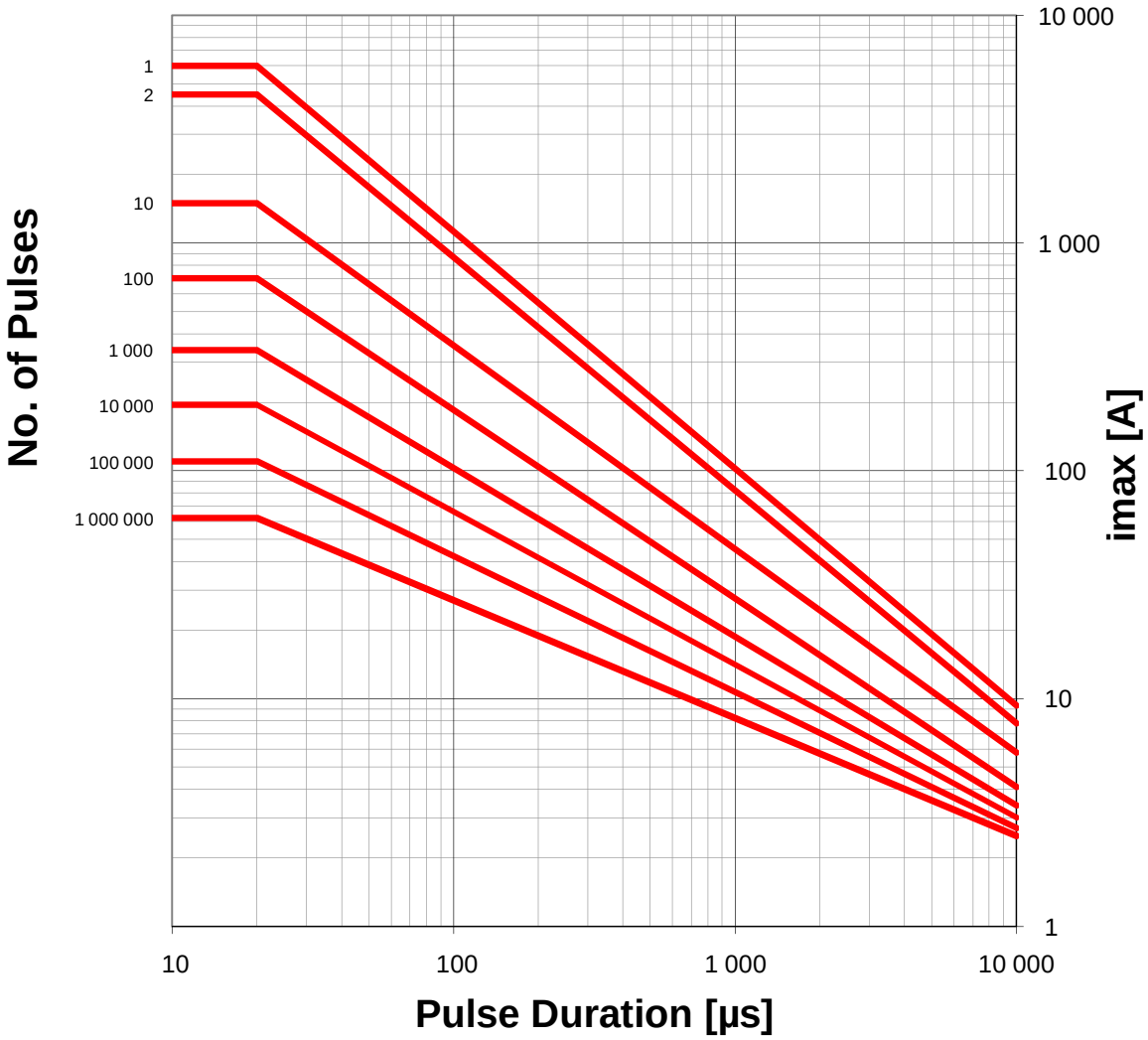
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Specification for Release

Customer :
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Description : **Disk Varistor HighSurge WE-VD**

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 displosion 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 secondaty currents and therewith caused damages.

General Release:	Customer			
Date	Signature			
	Würth Elektronik			
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