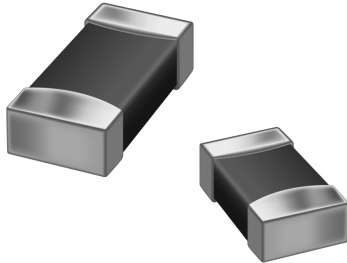




## Surface Mount Multilayer Varistors



### FEATURES

- Surface mount multilayer surge suppressor
- Inherent bidirectional clamping
- Low capacitance types available
- Excellent energy/volume ratio
- Suitable for wave or reflow soldering
- Compliance to IEC 1000-4-2
- Fully glass coated

Size 0805 (2012M) multilayer chip varistor with NiSn terminations.

### APPLICATIONS

- Data lines and I/O port protection
- Protection against ESD transients
- On-board protection of ICs and transistors
- Modem protection
- LCD protection

### PACKAGING

Available in 8 mm paper tape on reel packaging and in bulk on request.

### QUICK REFERENCE DATA

PARAMETER	VALUE	UNIT
Maximum continuous voltage:		
DC	5.5 to 31	V
AC	4 to 25	V
Maximum clamping voltage at 1 A	21 to 65	V
Capacitance range	140 to 470	pF
Maximum non-repetitive surge energy (10 × 1000 μs)	0.1	J
Maximum peak current (8 × 20 μs)	30	A
Response time	0.5	ns
Operating temperature range	-55 to 125	°C
Storage temperature range	-25 to 40	°C
Maximum continuous dissipation	10	mW

### ELECTRICAL DATA AND ORDERING INFORMATION

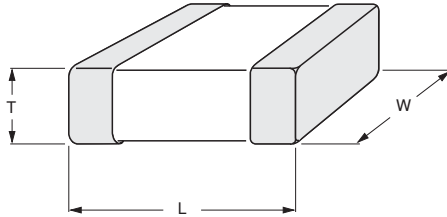
MAXIMUM OPERATING VOLTAGE		VOLTAGE <sup>(2)</sup> at 1 mA		MAXIMUM CLAMPING VOLTAGE at 1 A (V)	CAP. at 1 kHz (pF)	TOL. (%)	CATALOG NUMBERS 2322 ... ..
RMS <sup>(1)</sup> (V)	DC (V)	MIN. (V)	MAX. (V)				
4.0	5.5	6.4	9.6	21	470	typ.	574 20403
14.0	18.0	19.8	25.7	40	130	typ.	574 21403
25.0	31	35.1	45.6	65	140	typ.	574 22503

#### Notes

1. The sinusoidal voltage is assumed as the normal operating condition. If a non-sinusoidal voltage is present, type selection should be based on multiplying the peak voltage by a factor of 0.707.
2. The voltage measured at 1 mA meets the requirements of "paragraph 4.3 of CECC specification 42000".

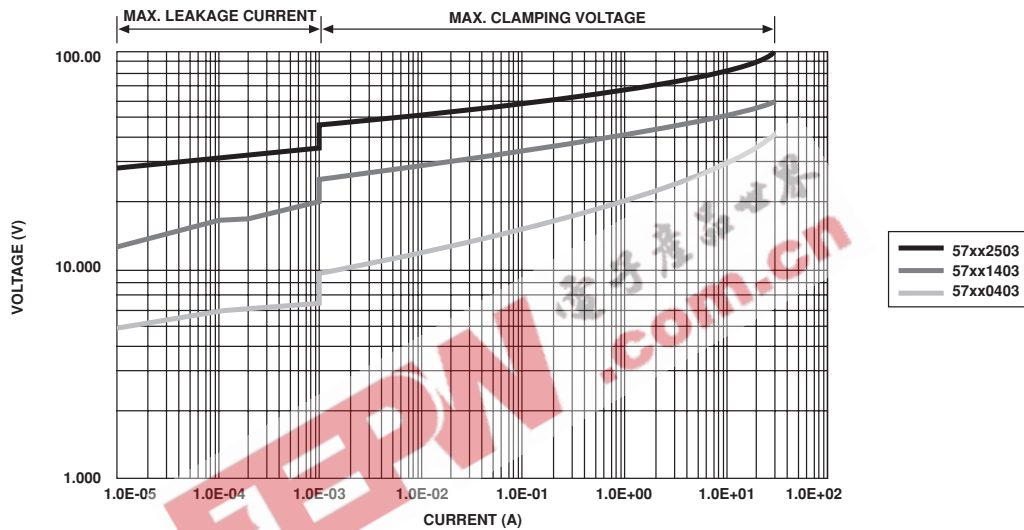


**DIMENSIONS** in millimeters



L	W	T
2.0 ±0.2	1.25 ±0.15	0.8 ± 0.15

**V/I CHARACTERISTIC**



TESTS AND REQUIREMENTS			
TEST / CONDITIONS OF TEST	D OR ND*	PROCEDURE	PERFORMANCE
<b>Sub-group A1</b>	ND		
Visual examination "IEC 4.3.1"			no visible damage
<b>Sub-group A2</b>	ND		
Voltage (CECC 4.3); Clamping voltage (CECC B.2.7)		at 1 mA	as specified
<b>Sub-group A3</b>	ND		
Dimensions (gauging) "IEC 4.3.3"			see 4.3.3
<b>Sub-group B1</b>	D		
Solderability: Test Td of "IEC 60068-2-20", solder bath method		235 °C ±5 °C for 5 ±0.5 s; at 1 mA	no visible damage; as in 9.2.1; as specified
Resistance to dissolution of metallization in accordance with "IEC 60068-2-58", solder bath method		260 °C ±5 °C for 30 ±1 s	as in 9.2.4

\* D = Destructive, N = Non-destructive