MLV0805E3



Vishay BCcomponents

SMD 0805 Multilayer Varistor



QUICK REFERENCE DATA					
PARAMETER	VALUE	UNIT			
Maximum continuous voltage					
DC	5.6 to 30.0	V			
AC	4.0 to 25.0	V			
Maximum clamping voltage at 1 A	15.5 to 65	V			
Capacitance range (at 1 MHz)	80 to 860	pF			
Maximum energy (10/1000 µs)	0.1	J			
Maximum peak current	30 to 40	A			
Operating temperature range	-55 to 125	°C			
Weight	± 0.011	g			

FEATURES

- Surface mount multilayer surge suppressor
- Inherent bidirectional clamping
- Excellent energy/volume ratio
- · Suitable for reflow soldering
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

APPLICATIONS

Over-voltage and transient voltage protection:

- Data lines and I/O port protection
- Protection against ESD transients
- · On-board protection of IC's and transistors
- Modem protection
- LCD protection

DESCRIPTION

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

PACKAGING

Available in 8 mm paper tape, component pitch 4 mm on 180 mm reels containing 4000 pieces.

ELECTRICA	LECTRICAL DATA AND ORDERING INFORMATION						
WORKIN	G VOLTAGE	BREAKDOWN VOLTAGE	MAXIMUM CLAMPING VOLTAGE	MAXIMUM PEAK CURRENT	TYPICAL CAPACITANCE	PART NUMBER	
V _{RMS}	V _{DC}	V _b	Vc	Ι _Ρ	С	SAP	
v	V	V	v	Α	pF	MLV0805E3	
	< 10 µA	1 mA	1 A, 8/20 μs	8/20 μs	1 MHz		
4.0	5.6	7.1 to 9.3	15.5	40	860	0403T	
7.0	9.0	11.0 to 14.0	20.0	40	585	0703T	
11.0	14.0	16.5 to 20.3	30.0	40	280	1103T	
25.0	30.0	37.0 to 46.0	65.0	30	80	2503T	

Notes

Sinusoidal voltage assumed as normal operating condition.

If a non-sinusoidal voltage is present, the crest voltage x 0.707 should be used for type selection.

Breakdown voltage at a current of 1 mA, measured according to 4.5 of IEC 61051-1.

Parts are not recommended for automotive applications.



RoHS

COMPLIANT

HALOGEN

FREE

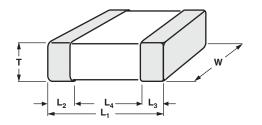
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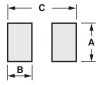
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DIMENSIONS in millimeters



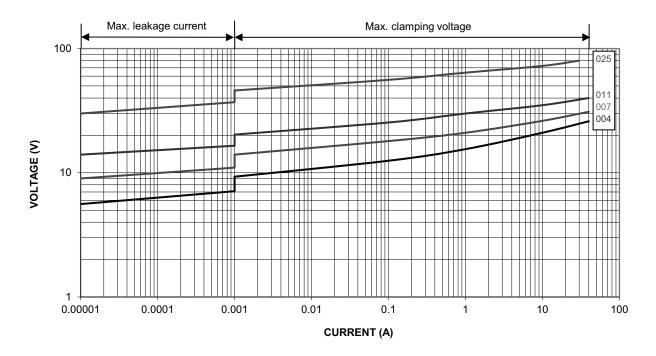
L ₁	w	Т	L_2 and L_3
2.0 ± 0.2	1.25 ± 0.2	1.0 max.	0.4 ± 0.3

RECOMMENDED FOOTPRINT in millimeters



Α	В	С
1.4	1.2	3.4

V/I CHARACTERISTICS



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