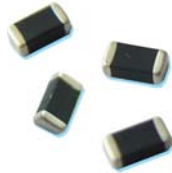
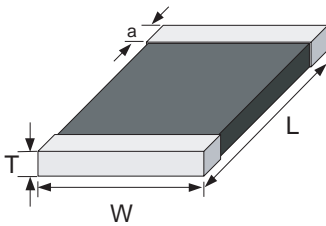


Automotive Series SMD

This product is not recommended for new designs. Please refer to Littelfuse series AUMLA.



Dimensions



Multilayer Ceramic Transient Voltage Suppressors for Automotive Applications

Features

Thin layer, high precise techniques
Lead free
Bi-directional clamping
Available with Nickel/Tin end termination or

Applications

- Circuit board and Devices
Protection of Automotive
- Airbag control
 - Wiper motors
 - Direct ignition
 - Engine control
 - Sensors

WebLinks

Further info see:
www.wickmanngroup.com

Further technical info see
technical varistor file:
www.wickmanngroup.com/download/techvaristor.pdf

Specifications

Packaging

Tape and Reel		
T 7 inch reel	0603	(4.000 pcs.)
	0805-1206	(3.000 pcs.)
	1210	(2.000 pcs.)
	1812-2220	(1.000 pcs.)

Material

Body: Ceramic (ZnO)
Terminals: Ni/Sn plated (code "P")

Operating Temperature

-55 to +125°C

Solderability

acc. to IEC 60068-2-58
235°C, 2s

Soldering Heat Resistance

260°C, 10 sec. (IEC 60068-2-58)
280°C, 5 sec. (IEC 60068-2-58)

Temperature coefficient (αV) of clamping voltage (V_c) @ specified test current

<0.01%/°C

Standards

IEC 61000-4-2
MIL-STD-750

Thermal Shock capability per MIL-STD-750

Method 1051: -55°C to +125°C
5 min.@25°C, 25 cycles
15 min.@each maximum

Power Dissipation

1.0 W max.

Maximum Ratings (125°C)					Specifications (25°C)			
Type	Packaging	max. cont. working voltage	load dump energy (10 pulses)	jump start voltage max. (5 min.)	max. clamping voltage at spec. current (8/20µs)	nominal voltage at 1mA (DC) test current	typ. capacitance at 1MHz	typ. inductance
		$V_{M(DC)}$ (V)	W_{LD} (J)	V_{jump} (V)	V_c (V)	$V_{N(DC)min.}$ (V) $V_{N(DC)max.}$ (V)	$C_{typ.}$ (pF)	$L_{typ.}$ (nH)
WA0805ML180A		18,0	1.0	24.5	40 @ 1.5A	23.0 32.0	500	1.5
WA1206ML180A		18,0	1.5	24.5	40 @ 1.5A	23.0 32.0	900	1.8
WA1210ML180A		18,0	3.0	24.5	40 @ 1.5A	23.0 32.0	2500	1.8
WA1812ML180A		18,0	6.0	24.5	40 @ 5A	23.0 32.0	5000	2.5
WA2230ML180A		18,0	25.0	24.5	40 @ 10A	23.0 32.0	4500	3.0
WA2220ML380A		38,0	30.0	50.0	77 @ 10A	48.5 56.0	4000	3.0

Order Information

Qty.	Order-Number	Type	Terminal Code	Packaging
		WA0805ML180	A	T

Specifications are subject to change without notice