

## Surface Mount Multilayer Varistors

### High Surge Protection (HA) Series

#### Features:

- Fast Response < 0.5 ns
- Low Capacitance
- Low Clamping Voltage and High Energy Absorption

#### Application Fields:

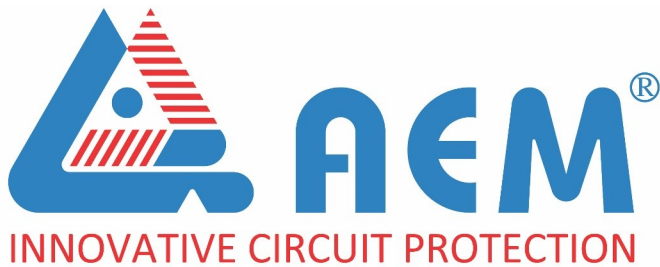
- Telecommunications
- Automotive Systems
- Data Systems
- Power Supplies

#### Ordering Information:

| Part Number       | Working Voltage (max)     |           | Breakdown Voltage<br>1 mA<br>(V) | Clamping Voltage (max)<br>(V) | Surge Current (max)<br>8/20 $\mu$ s<br>(A) | Typical Capacitance<br>1 kHz<br>(pF) |
|-------------------|---------------------------|-----------|----------------------------------|-------------------------------|--|--------------------------------------|
|                   | AC<br>(V <sub>RMS</sub> ) | DC<br>(V) |                                  |                               |  |                                      |
| MLV0805HA018V0150 | 14                        | 18        | 24 (21.6~26.4)                   | 39                            | 150  | 710                                  |
| MLV1206HA014V0200 | 11                        | 14        | 18 (15.3~20.7)                   | 30                            | 200  | 1200                                 |
| MLV1206HA018V0200 | 14                        | 18        | 24 (21.6~26.4)                   | 39                            | 200  | 780                                  |
| MLV1206HA022V0200 | 17                        | 22        | 27 (24.3~29.8)                   | 44                            | 200  | 750                                  |
| MLV1206HA026V0200 | 20                        | 26        | 33 (29.7~36.3)                   | 54                            | 200  | 700                                  |
| MLV1206HA030V0200 | 25                        | 30        | 39 (35.1~42.9)                   | 65                            | 200  | 510                                  |
| MLV1206HA038V0200 | 30                        | 38        | 47 (42.3~51.7)                   | 77                            | 200  | 440                                  |
| MLV1206HA045V0200 | 35                        | 45        | 56(50.4~61.6)                    | 90                            | 200  | 400                                  |
| MLV1210HA018V0400 | 14                        | 18        | 24 (21.6~26.4)                   | 39                            | 400  | 1600                                 |
| MLV1210HA022V0400 | 17                        | 22        | 27 (24.3~29.7)                   | 44                            | 400  | 1500                                 |
| MLV1210HA026V0400 | 20                        | 26        | 33 (29.7~36.3)                   | 54                            | 400  | 880                                  |
| MLV1210HA030V0400 | 25                        | 30        | 39 (35.1~42.9)                   | 65                            | 400  | 800                                  |
| MLV1210HA038V0400 | 30                        | 38        | 47 (42.3~51.7)                   | 77                            | 400  | 530                                  |
| MLV1812HA018V0800 | 14                        | 18        | 24 (21.6~26.4)                   | 39                            | 800  | 3500                                 |
| MLV1812HA030V0800 | 25                        | 30        | 39 (35.1~42.9)                   | 65                            | 800  | 2350                                 |
| MLV1812HA038V0800 | 30                        | 38        | 47 (42.3~51.7)                   | 77                            | 800  | 1600                                 |
| MLV1812HA045V0800 | 35                        | 45        | 56 (50.4~61.6)                   | 90                            | 800  | 1200                                 |
| MLV2220HA018V1200 | 14                        | 18        | 24 (21.6~26.4)                   | 39                            | 1200                                       | 8500                                 |
| MLV2220HA030V1200 | 25                        | 30        | 39 (35.1~42.9)                   | 65                            | 1200                                       | 7500                                 |
| MLV2220HA038V1200 | 30                        | 38        | 47 (42.3~51.7)                   | 77                            | 1200                                       | 4600                                 |
| MLV2220HA045V1200 | 35                        | 45        | 56 (50.4~61.6)                   | 90                            | 1200                                       | 3500                                 |

## Disclaimer

*Specifications are subject to change without notice. AEM products are designed for specific applications and should not be used for any purpose (including, without limitation, automotive, aerospace, medical, life-saving applications, or any other application which requires especially high reliability for the prevention of such defect as may directly cause damage to the third party's life, body or property) not expressly set forth in applicable AEM product documentation. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Warranties granted by AEM shall be deemed void for products used for any purpose not expressly set forth in applicable AEM product documentation. AEM shall not be liable for any claims or damages arising out of products used in applications not expressly intended by AEM as set forth in applicable AEM product documentation. The sale and use of AEM products is subject to AEM terms and conditions of sale. Please refer to AEM's website for updated catalog and terms and conditions of sale.*



---

**AEM Components (Suzhou) Co., Ltd**

**461 Zhongnan Street,  
China-Singapore Suzhou Industrial Park  
Jiangsu, P. R. China, 215026**

Tel: 86-512-6258-0028  
Fax: 86-512-6258-0018  
Email: [sales@aemchina.com](mailto:sales@aemchina.com)

**AEM Components (USA), Inc.**

**6670 Cobra Way, San Diego, CA 92121, USA**

Tel: 1-858-750-6100  
Fax: 1-858-481-1123  
Email: [sales@aemcomponents.com](mailto:sales@aemcomponents.com)