SMD Multilayer Chip Varistor

AMCV-1210H

RoHS Compliant

3.2x2.5x1.7mm

FEATURES:

- SMD type, small size suitable for high density mounting
- Excellent clamping ratio and strong capability of voltage surge suppression
- Excellent solderability (Ni, Sn plating)

APPLICATIONS:

- Transient voltage protection and voltage surge suppression for LED lighting
- Suitable for LCD-TV, STB, Switch, Router, PLC, Security System, smart meters, mobile phones
- Suppressing Induced / switching over-voltage caused by lightning and power
- Protecting DC-DC Module, I/O ports, IC driver

STANDARD SPECIFICATIONS:

Operating Temperature: -55˚C ~ +85˚C

Storage Temperature: -10˚C ~ +40˚C and RH 70% (Max.)

Part Number	Max. Working Voltage		Varistor Voltage	Max. Clamping Voltage		Rated Single Pulse Transient		Typical Capacitance
Test Condition	<20μA		@1mA DC	8/20μs	ESD	Energy 10/1000μs	Peak Current 8/20μs	@1V_{rms}, 1kHz
	DC	AC RMS						
Units	Volts	Volts	Volts	Volts	Amps	Joules	Amps	pF
Symbol	V_{WDC}	V_{WAC}	V_B	V_C	I_C	E_T	I_P	C_P
AMCV-1210H-5R5	5.5	4.0	12.0 [10.0-14.0]	18	5.0	0.7	400	3500
AMCV-1210H-090	9	6.4	14.0 [12.0-16.0]	20	5.0	0.9	400	2800
AMCV-1210H-120	12	8.5	16.0 [13.0-19.0]	25	5.0	1.0	400	2000
AMCV-1210H-140	14	10.0	19.0 [16.0-22.0]	30	5.0	1.2	400	1800
AMCV-1210H-180	18	12.7	25.0 [22.0-28.0]	40	5.0	1.5	400	1400
AMCV-1210H-220	22	15.6	30.0 [26.0-34.0]	45	5.0	1.7	400	1100
AMCV-1210H-260	26	18.4	35.0 [31.0-38.0]	58	5.0	1.9	400	900
AMCV-1210H-300	30	21.3	42.0 [37.0-46.0]	65	5.0	1.7	300	800
AMCV-1210H-380	38	30.0	50.0 [46.0-54.0]	75	5.0	2.0	300	700
AMCV-1210H-480	48	34.1	60.0 [54.0-67.0]	100	5.0	2.0	300	600
AMCV-1210H-560	56	40.0	68.0 [61.0-75.0]	120	5.0	2.3	300	500
AMCV-1210H-600	60	46.0	76.0 [69.0-83.0]	130	5.0	2.3	300	450
AMCV-1210H-650	65	50.0	82.0 [73.0-91.0]	140	5.0	2.0	300	350
AMCV-1210H-750	75	55.0	94.0 [85.0-103.0]	160	5.0	2.0	300	300
AMCV-1210H-850	85	60.0	100.0 [90.0-110.0]	170	5.0	2.0	300	250
AMCV-1210H-101	100	75.0	120.0 [108.0-132.0]	200	5.0	2.0	300	150

Unless otherwise specified, the standard atmospheric conditions for measurement/test as:
a. Ambient Temperature: 20±15°C
b. Relative Humidity: 65±20%
c. Air Pressure: 86 kPa to 106 kPa

Items	Test Methods and Remarks
Varistor Voltage at 1mA DC (V_B)	Measuring current: 1mA DC Duration: 0.2 to 2 sec
Capacitance (C)	Measure source: 1.0 V_{RMS} Test frequency: 1kHz.
Clamping Voltage (V_C)	Measuring source: 8/20us waveform

30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

SMD Multilayer Chip Varistor

AMCV-1210H

RoHS Compliant

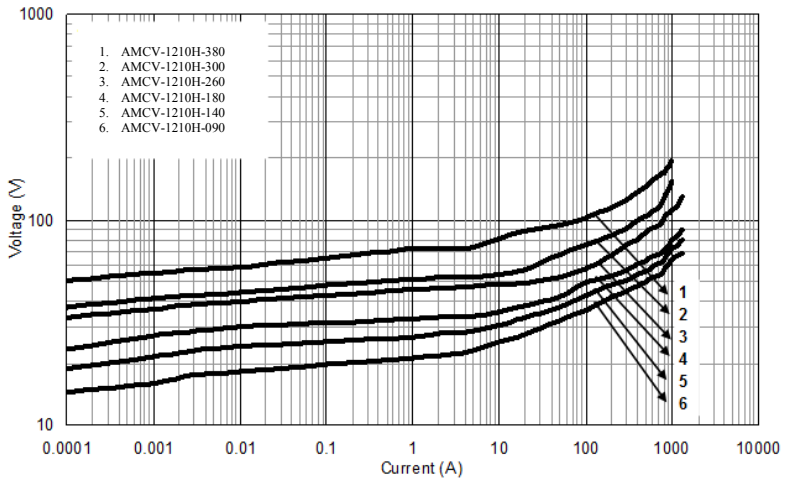
3.2x2.5x1.7mm

OPTIONS AND PART IDENTIFICATION:

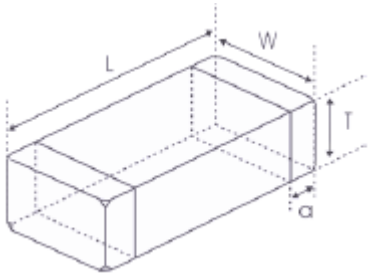
AMCV-1210H-□□□-□

Voltage Code	Packaging
Please refer to the table above	T: Tape and Reel (2kpcs / reel)

V/I CHARACTERISTICS

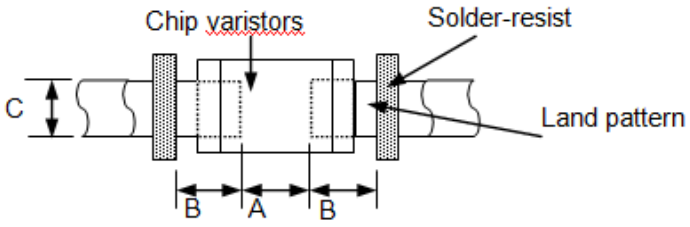


OUTLINE DIMENSION:



L	W	T	a
3.2±0.3	2.5±0.25	1.7Max.	0.25~0.75

Recommended Land Pattern



A	B	C
1.9~2.1	1.2~1.5	2.6~2.8

Dimension: mm

SMD Multilayer Chip Varistor

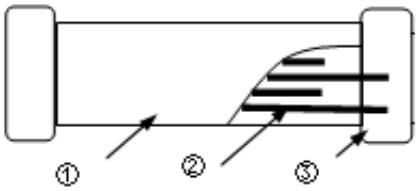
AMCV-1210H

RoHS Compliant

3.2x2.5x1.7mm

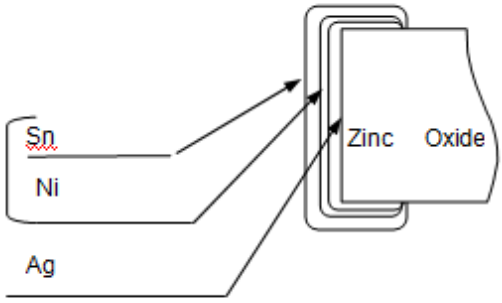
Materials

Side View

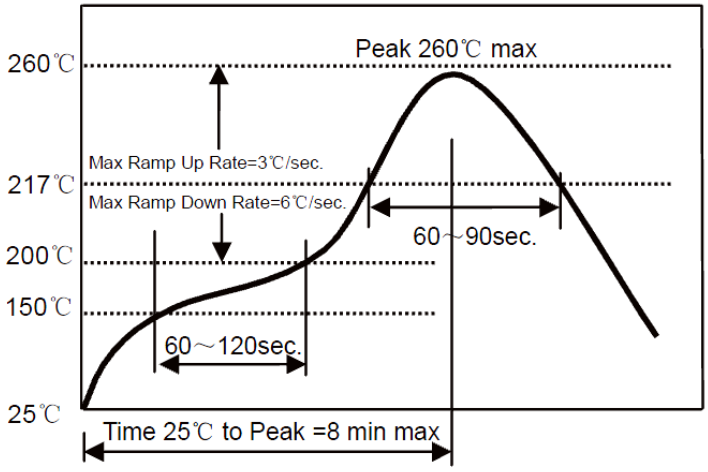


Top View

	Part Name	Material
1	**Base Material**	**ZnO**
2	**Internal Conductor**	**Ag-Pd**
3	**Terminal Electrode**	**Ag (Inner layer)** **Ni-Sn (Outer layer)**



REFLOW PROFILE:



Preheat Condition	150 to 200 ˚C; 60 to 120 sec.
Allowed time above 217 ˚C	60 to 90 sec.
Max temperature	260 ˚C
Max time at max temperature	10 sec.
Solder paste	Sn/3.0Ag/0.5Cu
Allowed Reflow time	2x max.

30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

SMD Multilayer Chip Varistor

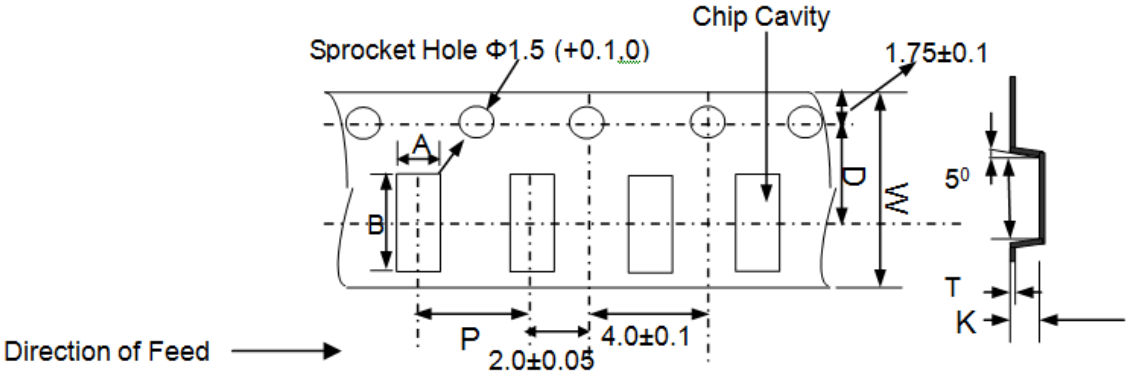
AMCV-1210H

RoHS Compliant

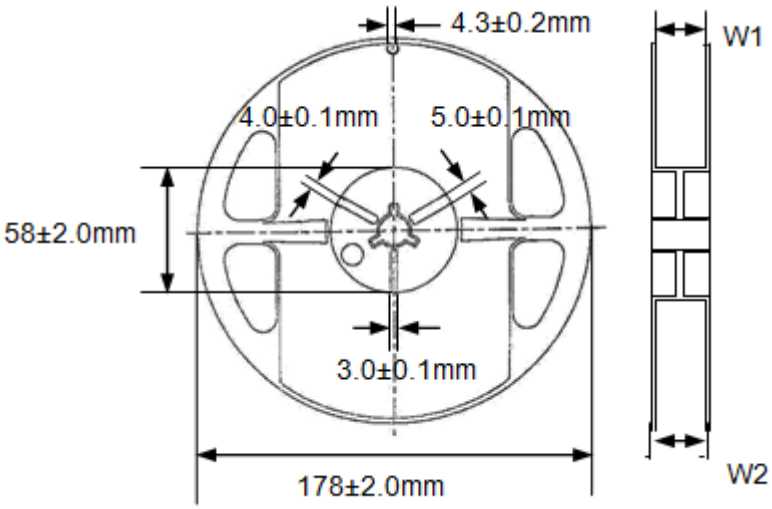
3.2x2.5x1.7mm

TAPE & REEL:

T: 2,000pcs / reel



W	A	B	D	P	K max	T max
8.0	2.75	3.45	3.50	4.0	1.80	0.33



W1	W2
10.0±0.5	12.5±0.5

Storage Conditions

a. The solderability of the external electrode may be deteriorated if packages are stored where they are exposed to high humidity Package must be stored at 40ºCor less and 70% RH or less.
b. The solderability of the external electrode may be deteriorated if packages are stored where they are exposed to dust of harmful gas (e.g. HCI, sulfurous gas of H_2S).
c. Packaging material may be deformed if package are stored where they are exposed to heat of direct sunlight.
d. Solderability shall be guaranteed for 6 months from the date of delivery on condition that they are stored at the environment specified in **1.3**. The parts that are stored more than 6 months shall be checked solderability before use.

Dimension: mm

ATTENTION: Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.

30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

LifeElectronics
Живое партнерство

ООО «ЛайфЭлектроникс» **“LifeElectronics” LLC**

ИНН 7805602321 КПП 780501001 Р/С 40702810122510004610 ФАКБ "АБСОЛЮТ БАНК" (ЗАО) в г.Санкт-Петербурге К/С 30101810900000000703 БИК 044030703

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- *Конкурентоспособные цены и скидки постоянным клиентам.*
- *Специальные условия для постоянных клиентов.*
- *Подбор аналогов.*
- *Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.*

- *Приемлемые сроки поставки, возможна ускоренная поставка.*
- *Доставку товара в любую точку России и стран СНГ.*
- *Комплексную поставку.*
- *Работу по проектам и поставку образцов.*
- *Формирование склада под заказчика.*

- *Сертификаты соответствия на поставляемую продукцию (по желанию клиента).*
- *Тестирование поставляемой продукции.*
- *Поставку компонентов, требующих военную и космическую приемку.*
- *Входной контроль качества.*
- *Наличие сертификата ISO.*

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- *Регистрацию проекта у производителя компонентов.*
- *Техническую поддержку проекта.*
- *Защиту от снятия компонента с производства.*
- *Оценку стоимости проекта по компонентам.*
- *Изготовление тестовой платы монтаж и пусконаладочные работы.*

Тел: +7 (812) 336 43 04 (многоканальный)
Email: org@lifeelectronics.ru

www.lifeelectronics.ru