

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







AMCV-2220H

RoHS Compliant



> 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: $-10^{\circ}\text{C} \sim +40^{\circ}\text{C}$ and RH 70% (Max.)

Part Number	Max. Working Voltage		Varistor Voltage	Max. Clamping Voltage		Rated Single Pulse Transient		Typical Capacitance
Test Condition	DC	20μA AC RMS	@1mA DC	8/20μs	ESD	Energy 10/1000μs	Peak Current 8/20µs	@1V _{rms} , 1kHz
Units	Volts	Volts	Volts	Volts	Amps	Joules	Amps	pF
Symbol	$V_{ m WDC}$	$V_{ m WAC}$	V_{B}	$V_{\rm C}$	$I_{\rm C}$	E_{T}	I_P	C_{P}
AMCV-2220H-5R5	5.5	4	12.0 [10.0-14.0]	18	10.0	2.3	1200	8000
AMCV-2220H-090	9	6.4	14.0 [12.0-16.0]	20	10.0	2.7	1200	7000
AMCV-2220H-120	12	8.5	16.0 [13.0-19.0]	25	10.0	3.2	1200	6400
AMCV-2220H-140	14	10.0	19.0 [16.0-22.0]	30	10.0	5.4	1200	6000
AMCV-2220H-180	18	12.7	25.0 [22.0-28.0]	40	10.0	5.8	1200	5000
AMCV-2220H-220	22	15.6	30.0 [26.0-34.0]	45	10.0	6.5	1200	4500
AMCV-2220H-260	26	18.4	35.0 [31.0-38.0]	58	10.0	7.8	1200	4000
AMCV-2220H-300	30	21.3	42.0 [37.0-46.0]	65	10.0	9.6	1200	3000
AMCV-2220H-380	38	30.0	50.0 [46.0-54.0]	75	10.0	12.0	1200	2200
AMCV-2220H-480	48	34.1	60.0 [54.0-67.0]	100	10.0	10.0	900	1500
AMCV-2220H-560	56	40.0	68.0 [61.0-75.0]	120	10.0	10.0	900	1300
AMCV-2220H-600	60	46.0	76.0 [69.0-83.0]	130	10.0	9.0	900	1100
AMCV-2220H-650	65	50.0	82.0 [73.0-91.0]	140	10.0	9.0	900	900
AMCV-2220H-750	75	55.0	94.0 [85.0-103.0]	160	10.0	8.5	900	800
AMCV-2220H-850	85	60.0	100.0 [90.0-110.0]	170	10.0	8.5	900	700
AMCV-2220H-101	100	75.0	120.0 [108.0-132.0]	200	10.0	8.5	900	400

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			



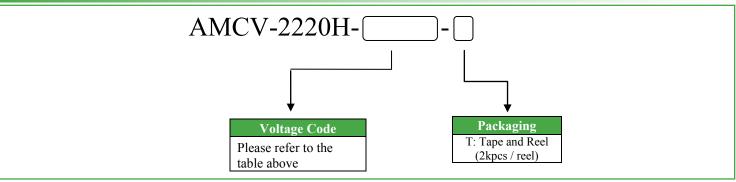


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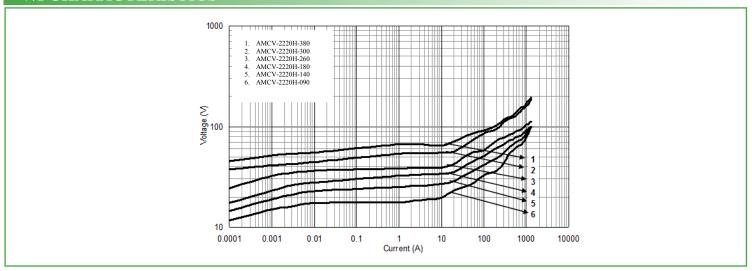




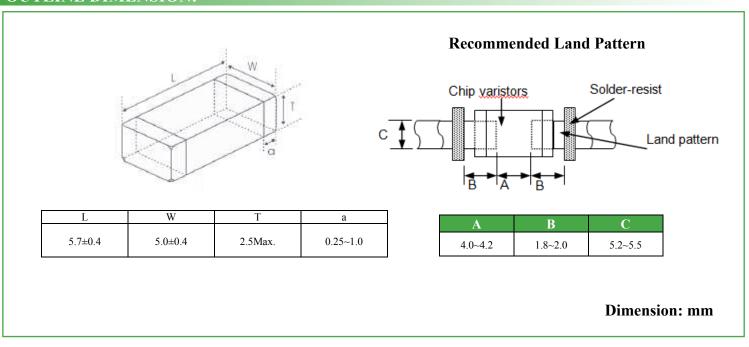




V/I CHARACTERISTICS



OUTLINE DIMENSION:







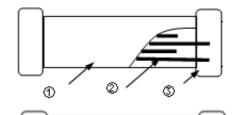
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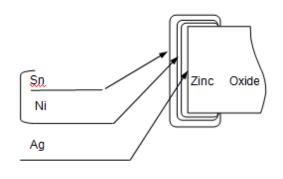
Materials

Side View

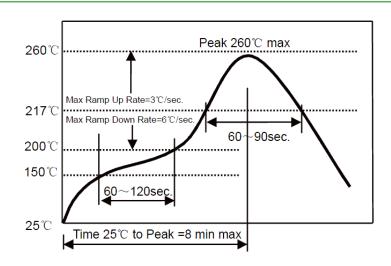


Top View		
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	Part Name	Material
1	Base Material	ZnO
2	Internal Conductor	Ag-Pd
3	Terminal Electrode	Ag (Inner layer) Ni-Sn (Outer layer)



▶ 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.





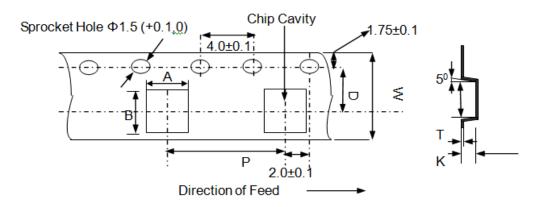
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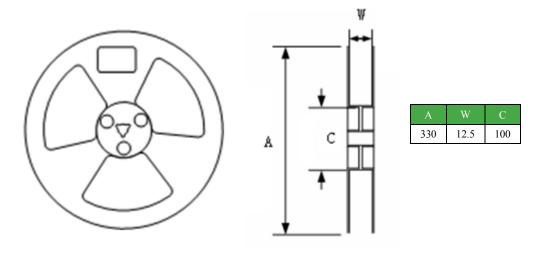


TAPE & REEL:

T: 2,000pcs / reel



W	A	В	D	P	K max	T max
12.0	5.10	6.00	5.50	8.0	2.7	0.33



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 40°Cor 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 H₂S).
- 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.



