

ECN/PCN No.: M1607

For Manufacturer

Product Description: SMD Multilayer Chip Varistor	Abrakon Part Number / Part Series: AMCV-1812H	☐ Documentation only ☒ Series ☒ ECN ☐ Part Number(s) ☒ EOL
Affected Revision: IR	New Revision: A	Application: ☐ Safety ☒ Non-Safety

Prior to Change:

Part Number	Max. Working Voltage		Varistor Voltage	Max. Clamping Voltage		Rated Single Pulse Transient		Typical Capacitance
Test Condition	<20 μ A		@1mA DC	8/20 μ s	ESD	Energy 10/1000 μ s	Peak Current 8/20 μ s	@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-1812H-5R5	5.5	4.0	12.0 [10.0-14.0]	18	5.0	1.0	800	5500
AMCV-1812H-090	9	6.4	14.0 [12.0-16.0]	20	5.0	1.2	800	4800
AMCV-1812H-120	12	8.5	16.0 [13.0-19.0]	25	5.0	1.5	800	4200
AMCV-1812H-140	14	10.0	19.0 [16.0-22.0]	30	5.0	1.9	800	3800
AMCV-1812H-180	18	12.7	25.0 [22.0-28.0]	40	5.0	2.3	800	3200
AMCV-1812H-220	22	15.6	30.0 [26.0-34.0]	45	5.0	2.5	800	2400
AMCV-1812H-260	26	18.4	35.0 [31.0-38.0]	58	5.0	3.0	800	2000
AMCV-1812H-300	30	21.3	42.0 [37.0-46.0]	65	5.0	3.7	800	1500
AMCV-1812H-380	38	30.0	50.0 [46.0-54.0]	75	5.0	4.2	800	1100
AMCV-1812H-480	48	34.1	60.0 [54.0-67.0]	100	5.0	4.0	600	900
AMCV-1812H-560	56	40.0	68.0 [61.0-75.0]	120	5.0	4.3	600	800
AMCV-1812H-600	60	46.0	76.0 [69.0-83.0]	130	5.0	4.3	600	600
AMCV-1812H-650	65	50.0	82.0 [73.0-91.0]	140	5.0	4.0	600	500
AMCV-1812H-750	75	55.0	94.0 [85.0-103.0]	160	5.0	4.0	600	400
AMCV-1812H-850	85	60.0	100.0 [90.0-110.0]	170	5.0	4.0	600	300
AMCV-1812H-101	100	75.0	120.0 [108.0-132.0]	200	5.0	4.0	600	200

Packing

T: 2,000pcs / reel

After Change:

Part Number	Max. Working Voltage		Varistor Voltage	Max. Clamping Voltage		Rated Single Pulse Transient		
Test Condition	<20 μ A		@1mA DC	8/20 μ s	ESD	Energy 10/1000 μ s	Peak Current 8/20 μ s	Nominal Current 8/20 μ s
	DC	AC RMS						
Units	Volts	Volts	Volts	Volts	Amps	Joules	Amps	Amps
Symbol	V _{WDC}	V _{WAC}	V _B	V _C	I _C	E _T	I _P	I _N
AMCV-1812H-5R5	5.5	4.0	12.0 [10.0-14.0]	18	5.0	1.0	800	-
AMCV-1812H-090	9	6.4	14.0 [12.0-16.0]	30	5.0	0.5	800	500
AMCV-1812H-120	12	8.5	16.0 [13.0-19.0]	25	5.0	1.5	800	-
AMCV-1812H-140	14	10.0	19.0 [16.0-22.0]	30	5.0	1.9	800	-
AMCV-1812H-180	18	12.7	25.0 [22.0-28.0]	45	5.0	1.3	2000	1200
AMCV-1812H-220	22	15.6	30.0 [26.0-34.0]	45	5.0	2.5	800	-
AMCV-1812H-260	26	18.4	35.0 [31.0-38.0]	58	5.0	3.0	800	-
AMCV-1812H-300	30	21.3	42.0 [37.0-46.0]	70	5.0	2.0	2000	1200
AMCV-1812H-380	38	30.0	50.0 [46.0-54.0]	80	5.0	2.5	2000	1200
AMCV-1812H-480	48	34.1	60.0 [54.0-67.0]	110	5.0	3.0	2000	1200
AMCV-1812H-560	56	40.0	68.0 [61.0-75.0]	125	5.0	3.5	2000	1200
AMCV-1812H-600	60	46.0	76.0 [69.0-83.0]	130	5.0	3.0	2000	1200
AMCV-1812H-650	65	50.0	82.0 [73.0-91.0]	135	5.0	7.5	3000	1800
AMCV-1812H-750	75	55.0	94.0 [85.0-103.0]	160	5.0	4.0	600	-
AMCV-1812H-850	85	60.0	100.0 [90.0-110.0]	165	5.0	7.0	1500	1000
AMCV-1812H-101	100	75.0	120.0 [108.0-132.0]	200	5.0	7.0	1500	1000
AMCV-1812H-121	125	95.0	150.0 [135.0-165.0]	260	5.0	0.5	800	500
AMCV-1812H-151	150	115	180.0 [162.0-198.0]	325	5.0	0.5	500	300

Note:

Red: Part is discontinued.

Yellow: Change in specs

Green: New part number added

Tape & Reel:

4,000 pcs/reel (Part Numbers: AMCV-1812H-090, AMCV-1812H-180, AMCV-1812H-300, AMCV-1812H-380, AMCV-1812H-480)

2,000 pcs/reel (Part Numbers: All others)

Cause/Reason for Change:

Upgrading the specs of the series. Six (6) PN's will be discontinued.

Change Plan

Effective Date:

4/15/2025

Additional Remarks:

Change Declaration: The change may affect the function of the parts. The form and fit remain unchanged.
The following PNs have been discontinued:

AMCV-1812H-5R5
 AMCV-1812H-120
 AMCV-1812H-140
 AMCV-1812H-220
 AMCV-1812H-260
 AMCV-1812H-750

Issued Date: 4/15/2025	Issued By: <i>Ahmed Alamin</i>	Issued Department: Engineering
Approval: <i>Syed Raza</i> Engineering VP	Approval: <i>Reuben Quintanilla</i> Quality Director	Approval: <i>Ying Huang</i> Purchasing Director
For Abracon EOL only		
Last Time Buy (if applicable):		Alternate Part Number / Part Series:
Additional Approval:	Additional Approval:	Additional Approval:
Customer Approval (If Applicable)		
Qualification Status: ☐ Approved ☐ Not accepted <i>Note: It is considered approved if there is no feedback from the customer 1 month after ECN/PCN is released.</i>		
Customer Part Number:		Customer Project:
Company Name:	Company Representative:	Representative Signature:
Customer Remarks:		