

High Voltage MLC Ledged

CH Style – Radial, Dual-in-line & ‘L’ Lead SMT



Capacitance range: 1.2 nF to 2.7 μ F
 Voltage range: 1kV to 5kV
 Temperature range: -55°C to +125°C

This range of radial, dual-in-line for both through hole and surface mount products is intended for use in high voltage power supplies and voltage multiplier circuits. The multilayer ceramic construction offers excellent volumetric efficiency compared with other high voltage dielectrics. They are suitable for both high reliability and industrial applications.

ELECTRICAL SPECIFICATIONS

Temperature Coefficient CECC 30 000, (4.24.1)
 2C1/X7R: C Temperature Characteristic - \pm 15% (0v dc)

Capacitance Test 25°C
 2C1/X7R: Measured at 1 VRMS max at 1KHz

Dissipation Factor 25°C
 2C1/X7R: 2.5% max at 1KHz, 1 VRMS

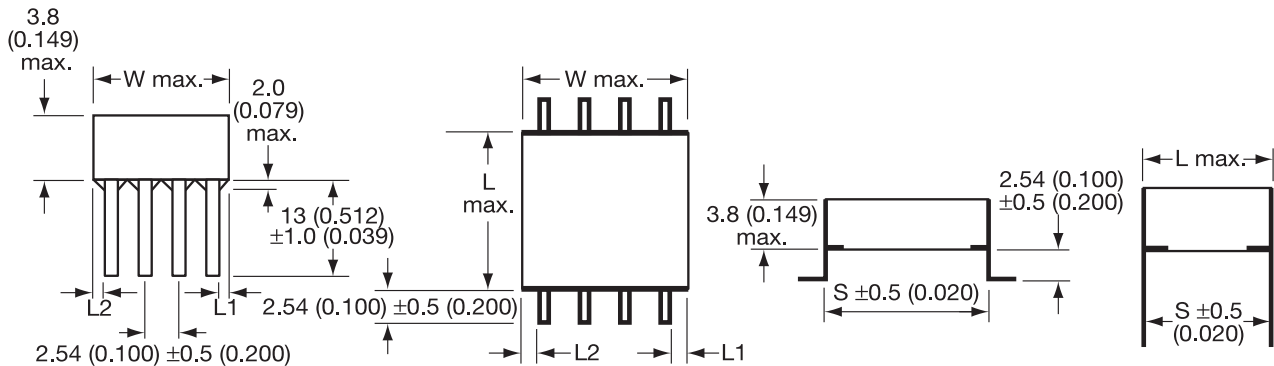
Insulation Resistance
 2C1/X7R: 100K megohms or 1000 megohms- μ F, whichever is less

Dielectric Withstanding Voltage 25°C
 130% rated voltage for 5 seconds

Life Test (1000 hrs) CECC 30000 (4.23)
 12C1/X7R: 120% rated voltage at +125°C.

Aging
 2C1/X7R: 2.5%/decade hour

DUAL-IN-LINE



DIMENSIONS

millimeters (inches)

Style	L (max)	W (max)	S (nom)	No. of Leads per side
CH41	9.2 (0.362)	8.7 (0.342)	8.2 (0.323)	3
CH51	10.7 (0.421)	10.7 (0.421)	10.2 (0.400)	4
CH61	14.9 (0.587)	13.6 (0.535)	14.0 (0.551)	5
CH76	21.6 (0.850)	16.6 (0.654)	20.3* (0.800)	6
CH91	24.0 (0.944)	40.6 (1.598)	20.3* (0.800)	14

Lead width 0.5 (0.020)
 Lead thickness 0.254 (0.010)
 L1 = L2 \pm 0.5 (0.020)

*Tolerance \pm 0.8

HOW TO ORDER

CH	41	A	C	104	K	A	8	0	A	7
Style Code	Size Code	Voltage Code	Dielectric Code	Capacitance Code	Capacitance Tolerance	Specification Code	Finish Code	Lead Dia. Code	Lead Space Code	Lead Style Code
		A = 1kV G = 2kV H = 3kV J = 4kV K = 5kV	C = X7R	(2 significant digits + no. of zeros) eg. 105 = 1 μ F 106 = 10 μ F 107 = 100 μ F	X7R: K = \pm 10% M = \pm 20% P = +100, -0%	A = Non-customized	8 = Varnish	0 = Standard	A = Standard	0 = Dual in line straight 7 = Dual in line 'L' style

Not RoHS Compliant

Performance of SMPS capacitors can be simulated by downloading SpiCalci software program - <http://www.avx.com/download/software/SpiCalci-AVX.zip>
 Custom values, ratings and configurations are also available.



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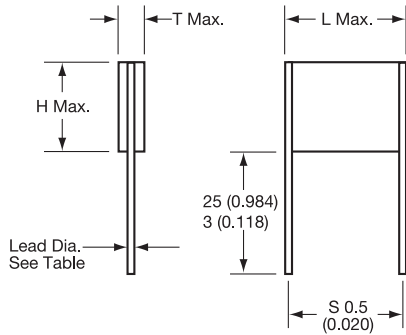
CV Style – Chip Assemblies



VERTICALLY MOUNTED RADIAL PRODUCT

Part Number format (CVxxxxxxxxxxA2)

Typical Part Number CV51AC154MA80A2



DIMENSIONS

millimeters (inches)

Style	L (max)	H (max)	T (max)	S (nom)	Lead Dia (nom)
CV41	10.6 (0.417)	8.70 (0.343)	3.80 (0.150)	8.20 (0.323)	0.70 (0.028)
CV51	11.9 (0.469)	10.7 (0.421)	3.80 (0.150)	10.2 (0.402)	0.90 (0.035)
CV61	16.5 (0.650)	13.6 (0.536)	3.80 (0.150)	15.2 (0.599)	0.90 (0.035)
CV76	22.7 (0.893)	16.6 (0.654)	3.80 (0.150)	21.2* (0.835)	0.90 (0.035)
CV91	24.0 (0.944)	40.6 (1.598)	3.80 (0.150)	21.2* (0.835)	1.20 (0.047)

*Tolerance $\pm 0.8\text{mm}$ (0.031)

Not RoHS Compliant

HOW TO ORDER

CV	51	A	C	154	M	A	8	0	A	2
Style Code	Size Code	Voltage Code	Dielectric Code	Capacitance Code	Capacitance Tolerance	Specification Code	Finish Code	Lead Dia. Code	Lead Space Code	Lead Style Code
		A = 1kV G = 2kV H = 3kV J = 4kV K = 5kV	C = X7R	(2 significant digits + no. of zeros) eg. 105 = 1 uF 106 = 10 uF 107 = 100 uF	X7R: K = $\pm 10\%$ M = $\pm 20\%$ P = +100, -0%	A = Non-customized	8 = Varnish	0 = Standard	A = Standard	



The Important Information/Disclaimer is incorporated in these specifications by reference and should be reviewed in full before placing any order.

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CH/CV Style – Chip Assemblies



2C1/X7R STABLE CERAMIC

Cap nF	CV41-CH41 Styles					CV51-CH51 Styles					CV61-CH61 Styles					CV76-CH76 Styles					CV91-CH91 Styles				
	1 Kv	2 Kv	3 Kv	4 Kv	5 Kv	1 Kv	2 Kv	3 Kv	4 Kv	5 Kv	1 Kv	2 Kv	3 Kv	4 Kv	5 Kv	1 Kv	2 Kv	3 Kv	4 Kv	5 Kv	1 Kv	2 Kv	3 Kv	4 Kv	5 Kv
1.2					K																				
1.3					K																				
1.5				J	K																				
2.2				J	K																				
2.7				J	K																				
3.3				J						K															
3.9				J						K															
4.7			H	J					J						K										
5.6			H						J						K										
6.8			H						J						K										
8.2		G	H						J						K										
10		G												J	K										
12		G						H						J						K					
15		G						H						J						K					
18	A						G	H											J	K					
22	A						G												J					K	
27	A						G												J					K	
33	A						G												J					K	
39	A				A								G	H					J					K	
47	A				A								G					H				J		K	
56	A				A								G					H				J		K	
68	A				A								G					H				J			
82	A				A								G									H	J		
100	A				A					A								G					H	J	
120	A				A					A								G					H	J	
150					A					A								G					H		
180					A					A						A						G	H		
220					A					A						A						G			
270					A					A						A						G			
330										A						A						G			
390										A						A					A				
470										A						A					A				
560										A						A					A				
680																A					A				
820																A					A				
1000																A					A				
1200																					A				
1500																					A				
1800																					A				
2200																					A				
2700																					A				

NB Figures in cells refer to size within ordering information

