

High Voltage Leaded (CH Style)



Radial, Dual-in-Line & 'L' Lead SMT

330 pF to 2.7 μ F
1kV to 5kV
-55°C to +125°C
1B/C0G and 2C1/X7R Dielectrics

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)
1B/C0G: A Temperature Coefficient - 0 ± 30 ppm/°C
2C1/X7R: C Temperature Characteristic $\pm 15\%$ (0v dc)

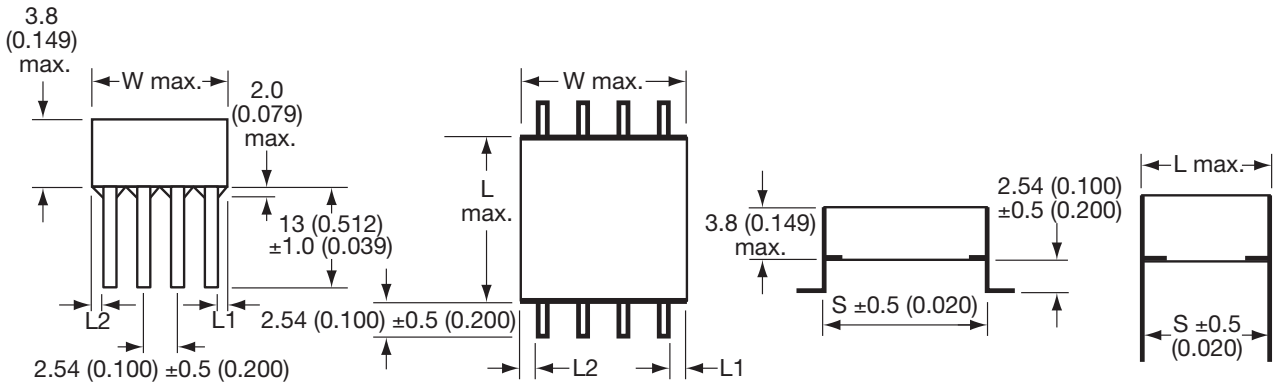
Capacitance Test 25°C
1B/C0G: Measured at 1 VRMS max at 1KHz (1MHz <100 pF)
2C1/X7R: Measured at 1 VRMS max at 1KHz

Dissipation Factor 25°C
1B/C0G: 0.15% max at 1KHz, 1 VRMS (1MHz for <100 pF)
2C1/X7R: 2.5% max at 1KHz, 1 VRMS

Insulation Resistance
1B/C0G & 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)
1B/C0G & 2C1/X7R: 120% rated voltage at +125°C.
Aging
1B/C0G: Zero
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

*Tolerance ± 0.8

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

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	A = C0G C = X7R	(2 significant digits + no. of zeros) eg. 105 = 1 μ F 106 = 10 μ F 107 = 100 μ F	C0G: J = $\pm 5\%$ K = $\pm 10\%$ M = $\pm 20\%$ 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



High Voltage Leaded (CV Style)

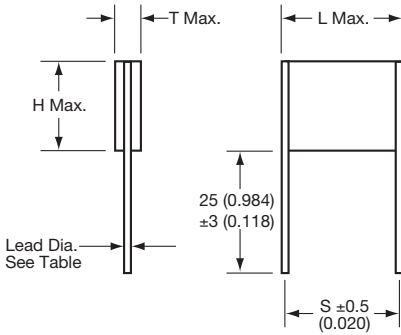


Chip Assemblies

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	22.7 (0.893)	40.6 (1.598)	3.80 (0.150)	21.2* (0.835)	1.20 (0.047)

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

HOW TO ORDER

CV

Style
Code

51

Size
Code

A

Voltage
Code
A = 1kV
G = 2kV
H = 3kV
J = 4kV
K = 5kV

C

Dielectric
Code
A = C0G
C = X7R

154

Capacitance
Code
(2 significant
digits + no.
of zeros)
eg. 105 = 1 μF
106 = 10 μF
107 = 100 μF

M

Capacitance
Tolerance
C0G: J = $\pm 5\%$
K = $\pm 10\%$
M = $\pm 20\%$
X7R: K = $\pm 10\%$
M = $\pm 20\%$
P = +100, -0%

A

Specification
Code
A = Non customized

8

Finish
Code
8 = Varnish

0

Lead Dia.
Code
0 = Standard

A

Lead Space
Code
A = Standard

2

Lead Style
Code

High Voltage Leaded (CH/CV Style)



Chip Assemblies

1B/C0G ULTRA STABLE CERAMIC

	CV41-CH41 Styles				CV51-CH51 Styles				CV61-CH61 Styles				CV76-CH76 Styles				CV91-CH91 Styles			
Cap pF																				
330				K																
390			J	K																
470			J	K																
560			J	K																
680			J					K												
820		H	J					K												
1000		H					J	K												
1200		H					J	K												
1500		H					J				K									
1800	G				H	J				K										
2200	G				H				J	K										
2700	G				H				J				K							
3300	G				G				H	J			K							
3900	G				G				H				J	K						
4700	G				G				H				J	K						
5600	A				G				H				J							K
6800	A				G			G					H	J						K
8200	A				G			G					H					J	K	
10000	A				G			G					H					J	K	
12000	A				A			G					H					J	K	
15000	A				A			G				G					H	J		
18000					A			G				G					H	J		
22000					A			A				G					H			
27000					A			A				G					H			
33000					A			A				G					H			
39000								A				G					G			
47000								A				A					G			
56000								A				A					G			
68000								A				A					G			
82000												A					G			
100000												A					G			
120000																A				
150000																A				
180000																A				
220000																A				
270000																A				
330000																A				

NB Figures in cells refer to size within ordering information



High Voltage Leaded (CH/CV Style)



Chip Assemblies

2C1/X7R STABLE CERAMIC

	CV41-CH41 Styles				CV51-CH51 Styles				CV61-CH61 Styles				CV76-CH76 Styles				CV91-CH91 Styles			
Cap nF																				
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				H				J	K									
12		G				H				J					K					
15		G				H				J					K					
18	A				G	H			H				J	K						
22	A				G				H				J							K
27	A				G				H				J							K
33	A				G				H				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				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				

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