High Voltage Leaded (CH Style)

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

330 pF to 2.7 µF
1kV to 5kV
-55ºC to +125ºC
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 ± 30ppm/ºC
2C1/X7R: C Temperature Characteristic - ± 15% (0v dc)

Capacitance Test 25ºC
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

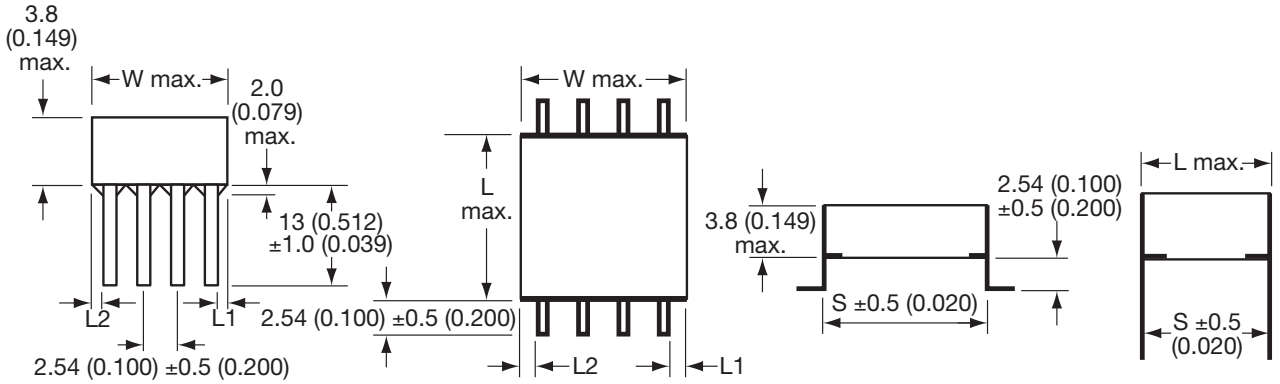
Insulation Resistance
1B/C0G & 2C1/X7R: 100K megohms or 1000 megohms-µF, whichever is less

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 +125ºC.

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** A = 1kV G = 2kV H = 3kV J = 4kV K = 5kV	**Dielectric Code** A = C0G C = X7R	**Capacitance Code** (2 significant digits + no. of zeros) eg. 105 = 1 µF 106 = 10 µF 107 = 100 µF	**Capacitance Tolerance** C0G: J = ±5% K = ±10% M = ±20% X7R: K = ±10% M = ±20% P = +100, -0%	**Specification Code** A = Non customized	**Finish Code** 8 = Varnish	**Lead Dia. Code** 0 = Standard	**Lead Space Code** A = Standard	**Lead Style Code** 0 = Dual in line straight 7 = Dual in line 'L' style

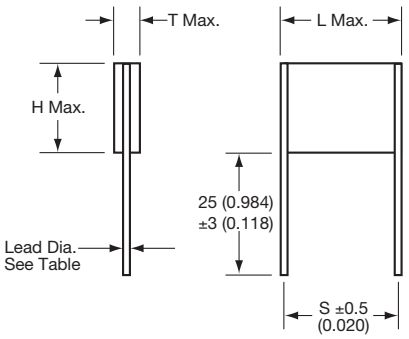
High Voltage Leaded (CV Style)

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 ± 0.8mm (0.031)

HOW TO ORDER

CV	51	A	C	154	M	A	8	0	A	2
Style Code	**Size Code**	**Voltage Code** A = 1kV G = 2kV H = 3kV J = 4kV K = 5kV	**Dielectric Code** A = C0G C = X7R	**Capacitance Code** (2 significant digits + no. of zeros) eg. 105 = 1 µF 106 = 10 µF 107 = 100 µF	**Capacitance Tolerance** C0G: J = ±5% K = ±10% M = ±20% X7R: K = ±10% M = ±20% P = +100, -0%	**Specification Code** A = Non customized	**Finish Code** 8 = Varnish	**Lead Dia. Code** 0 = Standard	**Lead Space Code** A = Standard	**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				
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