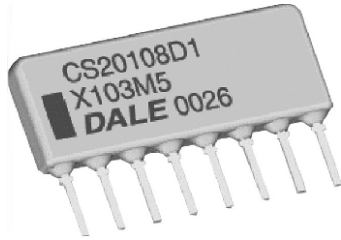


## Thick Film Capacitor Networks, Single-In-Line, Conformal Coated SIP



### FEATURES

- Isolated and bussed schematics available
- X7R and C0G capacitors available
- Multiple isolated capacitors
- Multiple capacitors, common ground
- Custom design capability
- "D" 0.300" (7.62 mm) package height (maximum)
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



### Note

\* This datasheet provides information about parts that are RoHS-compliant and /or parts that are non RoHS-compliant. For example, parts with lead (Pb) terminations are not RoHS-compliant. Please see the information / tables in this datasheet for details

### STANDARD ELECTRICAL SPECIFICATIONS

VISHAY DALE MODEL	PROFILE	SCHEMATIC	CAPACITANCE RANGE		CAPACITANCE TOLERANCE (-55 °C to +125 °C) ± %	CAPACITANCE VOLTAGE at 85 °C V <sub>DC</sub>
			C0G (1)	X7R		
CS201	D	1	33 pF to 3900 pF	470 pF to 0.1 μF	10, 20	50
CS201	D	3	33 pF to 3900 pF	470 pF to 0.1 μF	10, 20	50
CS201	D	4	33 pF to 3900 pF	470 pF to 0.1 μF	10, 20	50

### Note

(1) C0G capacitors may be substituted for X7R capacitors

### TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	CS201	
		C0G	X7R
Temperature coefficient (-55 °C to +125 °C)	ppm/°C or %	± 30 ppm/°C	± 15 %
Dissipation factor (maximum)	± %	0.15	2.5

### MATERIAL SPECIFICATIONS

Marking resistance to solvents	Permanency testing per MIL-STD-202, method 215
Solderability	Per MIL-STD-202, method 208E
Body	High alumina, epoxy coated (flammability UL 94 V-0)
Terminals	Phosphorus-bronze, solder plated
Marking	Pin #1 identifier, Dale or D, part number (abbreviated as space allows), date code

### GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: 20108D1C103K5P (preferred part numbering format)

2 0 1 0 8 D 1 C 1 0 3 K 5 P

GLOBAL MODEL	PIN COUNT	PACKAGE HEIGHT	SCHEMATIC	CHARACTERISTIC	CAPACITANCE VALUE	TOLERANCE	VOLTAGE	PACKAGING	SPECIAL
201 = CS201	04 to 18 pin available 04 = 4 pin 08 = 8 pin 18 = 18 pin	D = "D" profile	1 3 4 0 = special	C = C0G X = X7R S = special	(in picofarads) 2 digit significant figure, followed by a multiplier 330 = 33 pF 392 = 3900 pF 104 = 0.1 μF	K = ± 10 % M = ± 20 % S = special	5 = 50 V S = special	E = lead (Pb)-free, bulk P = tin / lead, bulk	Blank = standard (dash number) (up to 3 digits) From 1 to 999 as applicable

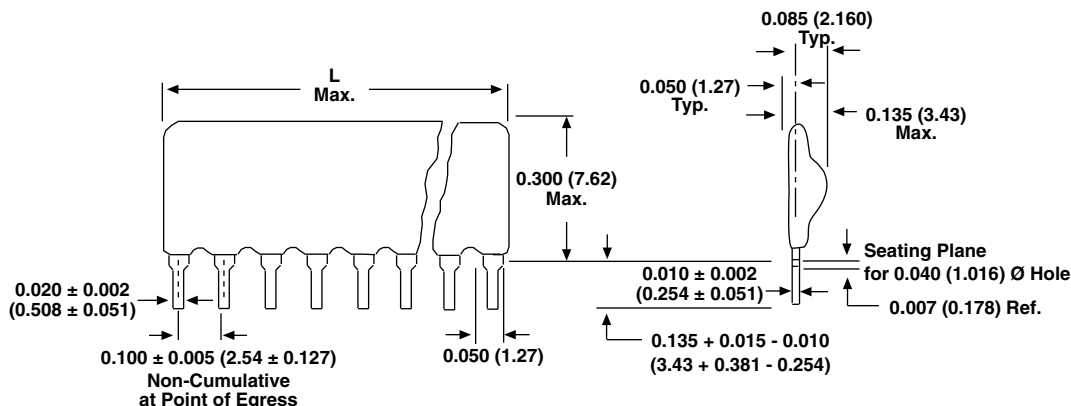
Historical Part Number example: CS20108D1C103K5 (will continue to be accepted)

CS201	08	D	1	C	103	K	5	P03
HISTORICAL MODEL	PIN COUNT	PACKAGE HEIGHT	SCHEMATIC	CHARACTERISTIC	CAPACITANCE VALUE	TOLERANCE	VOLTAGE	PACKAGING

### Note

- For additional information on packaging, refer to the Through-hole Network Packaging document ([www.vishay.com/doc?31542](http://www.vishay.com/doc?31542))

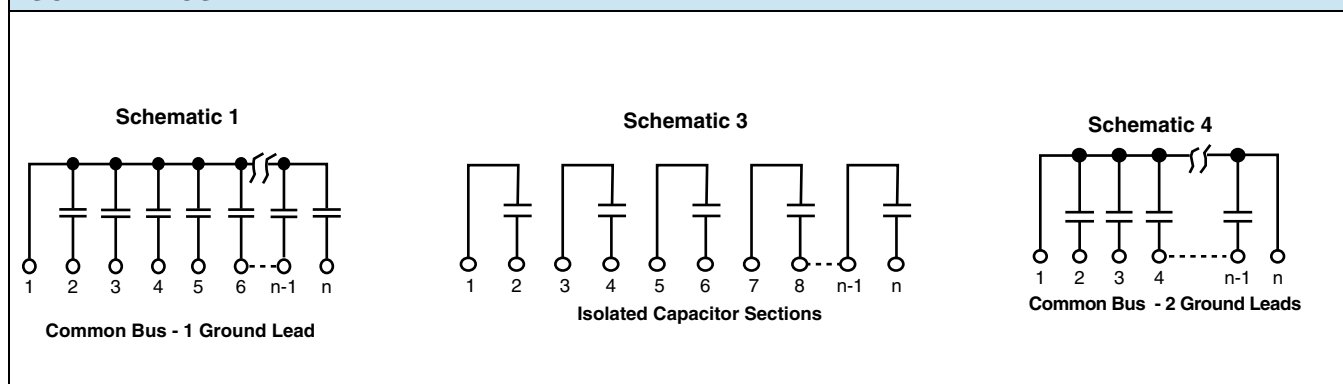
**DIMENSIONS** in inches (millimeters)



Pin #1 is extreme left-hand terminal on side with marking.

NUMBER OF PINS	L MAXIMUM	NUMBER OF PINS	L MAXIMUM	NUMBER OF PINS	L MAXIMUM
4 pin	0.400 (10.16)	9 pin	0.900 (22.86)	14 pin	1.400 (35.56)
5 pin	0.500 (12.70)	10 pin	1.000 (25.40)	15 pin	1.500 (38.10)
6 pin	0.600 (15.24)	11 pin	1.100 (27.94)	16 pin	1.600 (40.64)
7 pin	0.700 (17.78)	12 pin	1.200 (30.48)	17 pin	1.700 (43.18)
8 pin	0.800 (20.32)	13 pin	1.300 (33.02)	18 pin	1.800 (45.72)

**SCHEMATICS**





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