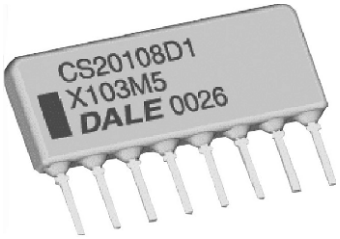
Thick Film Capacitor Networks, Single-In-Line, Conformal Coated SIP



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)
- Compliant to RoHS directive 2002/95/EC
- Halogen-free according to IEC 61249-2-21 definition

Pb Available

e1

RoHS* COMPLIANT

HALOGEN FREE

STANDARD ELECTRICAL SPECIFICATIONS

VISHAY DALE MODEL	PROFILE	SCHEMATIC	CAPACITANCE RANGE		CAPACITANCE TOLERANCE (- 55 °C to + 125 °C) ± %	CAPACITANCE VOLTAGE at 85 °C V_{DC}
			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

MECHANICAL 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			

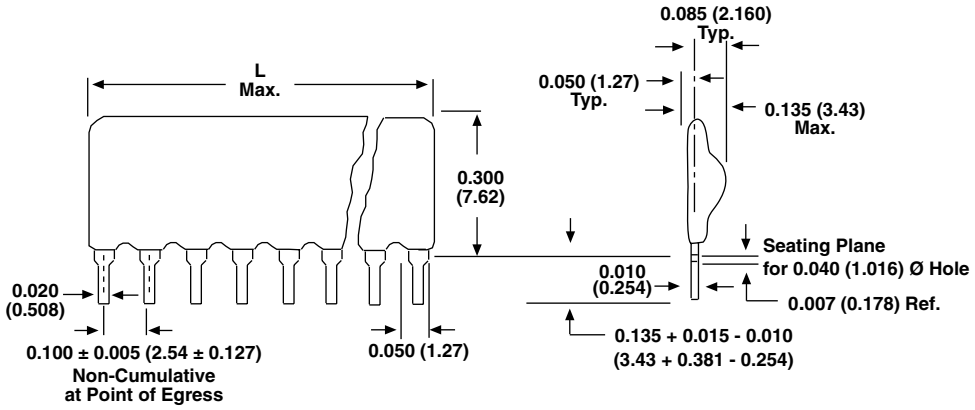
GLOBAL MODEL	PIN COUNT	PACKAGE HEIGHT	SCHEMATIC	CHARACTERISTIC	CAPACITANCE VALUE	TOLERANCE	VOLTAGE	PACKAGING	SPECIAL
201 = CS201	04 to 18 pin available **04** = 4 pin **08** = 8 pin **18** = 18 pin	**D** = "D" Profile	**1** **3** **4** **0** = Special	**C** = C0G **X** = X7R **S** = Special	(in picofarads) 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

* Pb containing terminations are not RoHS compliant, exemptions may apply

DIMENSIONS in inches (millimeters)

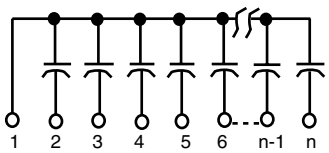


Pin #1 is extreme left-hand terminal on side with marking.

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)

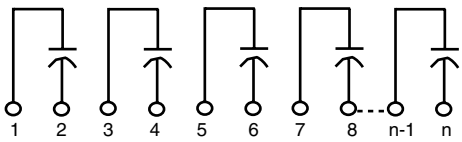
SCHEMATICS

Schematic 1



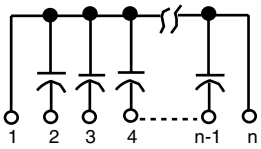
Common Bus - 1 Ground Lead

Schematic 3



Isolated Capacitor Sections

Schematic 4



Common Bus - 2 Ground Leads

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Телефон: 8 (812) 309-75-97 (многоканальный)
Факс: 8 (812) 320-03-32
Электронная почта: ocean@oceanchips.ru
Web: http://oceanchips.ru/
Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А