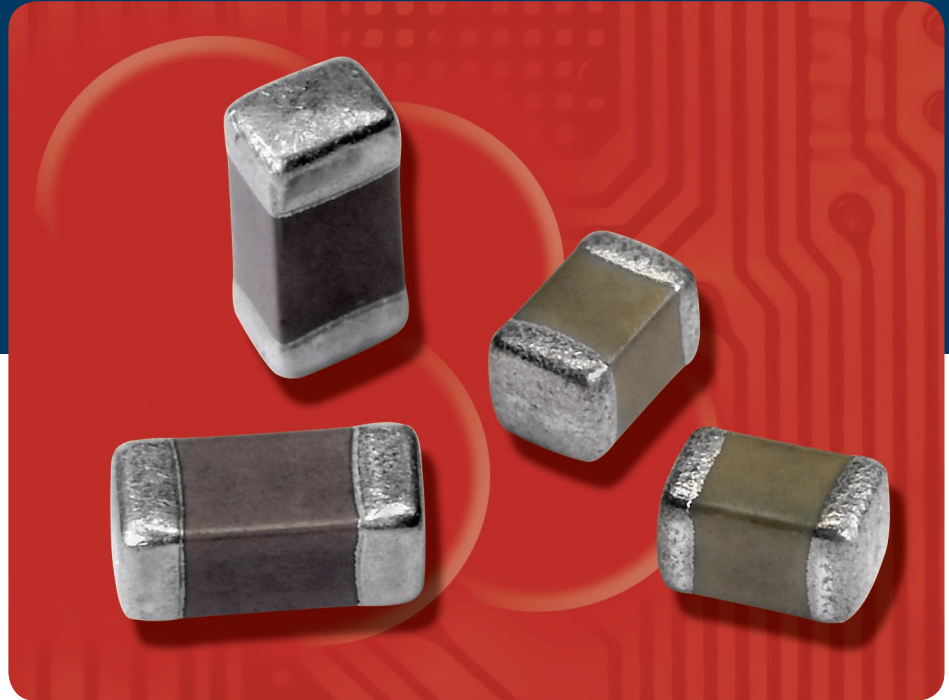




# MULTILAYER CERAMIC CHIP CAPACITORS

VJ...W1BC COG (NPO)



## Surface-Mount MLCC Capacitors for Commodity Applications

### KEY BENEFITS

- Ultra-stable class 1 dielectric
- 100 % tin termination
- Available in four standard case sizes: 0402, 0603, 0805, 1206

### APPLICATIONS

- Telecommunications
- Consumer electronics
- Power supplies
- Industrial

Datasheet is available on our web site at [www.vishay.com](http://www.vishay.com)  
for VJ...W1BC NPO - <http://www.vishay.com/doc?28501>



# Surface Mount Multilayer Ceramic Chip Capacitors for Commodity Applications

## FEATURES

- Ultra stable class 1 dielectric
- Four standard sizes
- High capacitance per unit volume
- Supplied in tape on reel
- For high frequency applications
- Ni-barrier with 100 % tin terminations
- Dry sheet manufacturing technology

## APPLICATIONS

- Consumer electronics
- Telecommunications
- Data processing



RoHS COMPLIANT

## ELECTRICAL SPECIFICATIONS

Note: Electrical characteristics at +25 °C unless otherwise specified

**Operating Temperature:** -55 °C to +125 °C

**Capacitance Range:** 0.5 pF to 0.039 μF

**Voltage Rating:** 10 Vdc to 100 Vdc

**Temperature Coefficient of Capacitance (TCC):** 0 ± 30 ppm/°C from -55 °C to +125 °C

**Disipation Factor (DF):** Cap < 30 pF: 0.400 + 20C

Cap ≥ 30 pF: Q ≥ 1000

## Test Conditions:

Cap ≤ 1000 pF 1.0 ± 0.2 V<sub>rms</sub>, 1 MHz ± 10 %

Cap > 1000 pF 1.0 ± 0.2 V<sub>rms</sub>, 1 kHz ± 10 %

**Aging Rate:** 0 % maximum per decade

**Insulation Resistance (IR):** after 120 s at U<sub>R</sub> (DC): 10 GΩ or 500 Ω.F whichever is less

**Dielectric Withstand Voltage (DWV):** This is the maximum voltage the capacitors are tested 1 to 5 s period and the charge/discharge current does not exceed 50 mA ≤ 50 Vdc; DWV at 250 % of rated voltage 100 Vdc; DWV at 300 % of rated voltage

DIELECTRIC		NP0																			
EIA CAP CODE	EIA SIZE	10V	16V	25V	50V	100V	10V	16V	25V	50V	100V	10V	16V	25V	50V	100V	10V	16V	25V	50V	100V
0402	0402	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
0603	0603	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
0805	0805	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1206	1206	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1210	1210	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1218	1218	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1225	1225	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1235	1235	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1243	1243	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1250	1250	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1256	1256	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1263	1263	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1268	1268	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1273	1273	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1278	1278	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1283	1283	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1288	1288	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1293	1293	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1298	1298	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1303	1303	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1308	1308	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1313	1313	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1318	1318	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1323	1323	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1328	1328	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1333	1333	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1338	1338	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1343	1343	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1348	1348	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1353	1353	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1358	1358	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1363	1363	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1368	1368	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1373	1373	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1378	1378	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1383	1383	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1388	1388	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1393	1393	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1398	1398	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1403	1403	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1408	1408	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1413	1413	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1418	1418	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1423	1423	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1428	1428	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1433	1433	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1438	1438	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1443	1443	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1448	1448	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1453	1453	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1458	1458	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1463	1463	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1468	1468	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1473	1473	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1478	1478	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1483	1483	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1488	1488	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1493	1493	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1498	1498	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1503	1503	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1508	1508	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1513	1513	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1518	1518	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1523	1523	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1528	1528	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1533	1533	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1538	1538	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1543	1543	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1548	1548	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1553	1553	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1558	1558	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1563	1563	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
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1588	1588	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1593	1593	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
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1603	1603	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1608	1608	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1613	1613	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1618	1618	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1623	1623	N	N	N	N																