

# SPECIFICATION FOR TDK MULTILAYER CERAMIC CHIP CAPACITORS

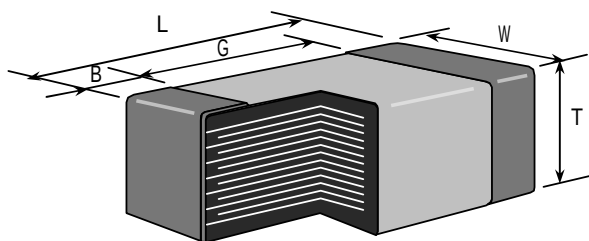
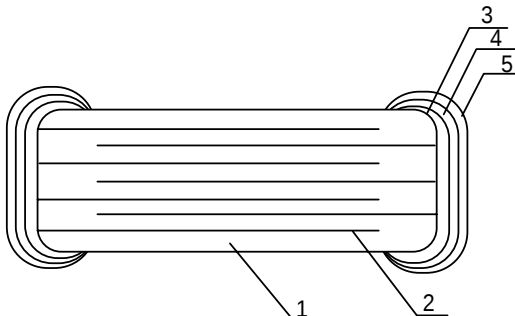
Date issue : Jul. 2. '09

TDK P/N

|              |            |           |            |          |          |             |
|--------------|------------|-----------|------------|----------|----------|-------------|
| <b>C3225</b> | <b>X7S</b> | <b>2A</b> | <b>335</b> | <b>K</b> | <b>T</b> | <b>XXXX</b> |
| 1)           | 2)         | 3)        | 4)         | 5)       | 6)       | 7)          |

| No. | Segment                     | Detail                 | Comments                       |
|-----|-----------------------------|------------------------|--------------------------------|
| 1   | Case Size                   | 3.20 x 2.50 mm         | See below for dimensions.      |
| 2   | Temperature Characteristics | -55 to +125degC +/-22% | Class II : Conforms to EIA 198 |
| 3   | Rated Voltage               | 100V                   | DC                             |
| 4   | Capacitance                 | 3,300,000pF            | 1.0+/-0.2Vrms, 1kHz+/-10%      |
| 5   | Capacitance Tolerance       | K : +/-10%             | Conforms to IEC 384-9          |
| 6   | Packaging Style             | Tape and Reel, 8mm     | EIA 481 Format                 |
| 7   | TDK internal Code           | XXXX                   | (Internal TDK use only)        |
| -   | Dissipation Factor          | 0.05 Max.              | 1.0+/-0.2Vrms, 1kHz+/-10%      |
| -   | Insulation Resistance       | 151Mohm min.           | apply rated voltage for 60s    |

Condition for life : Apply 1.5 x rated voltage at maximum operating temperature +/-2degC for 1,000+48, 0h.

| Physical Dimensions                                                                                                                                                                                                                                          | Material System                                                                      |                |   |              |   |              |   |              |   |           |   |       |                                                                                                                                                                                                                                                                                                   |     |      |          |   |            |        |   |           |    |   |             |    |   |    |   |    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------|---|--------------|---|--------------|---|--------------|---|-----------|---|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|----------|---|------------|--------|---|-----------|----|---|-------------|----|---|----|---|----|
|                                                                                                                                                                           |  |                |   |              |   |              |   |              |   |           |   |       |                                                                                                                                                                                                                                                                                                   |     |      |          |   |            |        |   |           |    |   |             |    |   |    |   |    |
| <table><tr><th>Symbol</th><th>Dimensions(mm)</th></tr><tr><td>L</td><td>3.20 +/-0.40</td></tr><tr><td>W</td><td>2.50 +/-0.30</td></tr><tr><td>T</td><td>2.00 +/-0.20</td></tr><tr><td>B</td><td>0.20 min.</td></tr><tr><td>G</td><td>_____</td></tr></table> | Symbol                                                                               | Dimensions(mm) | L | 3.20 +/-0.40 | W | 2.50 +/-0.30 | T | 2.00 +/-0.20 | B | 0.20 min. | G | _____ | <table><tr><th>No.</th><th>Name</th><th>Material</th></tr><tr><td>1</td><td>Dielectric</td><td>BaTiO3</td></tr><tr><td>2</td><td>Electrode</td><td>Ni</td></tr><tr><td>3</td><td rowspan="3">Termination</td><td>Cu</td></tr><tr><td>4</td><td>Ni</td></tr><tr><td>5</td><td>Sn</td></tr></table> | No. | Name | Material | 1 | Dielectric | BaTiO3 | 2 | Electrode | Ni | 3 | Termination | Cu | 4 | Ni | 5 | Sn |
| Symbol                                                                                                                                                                                                                                                       | Dimensions(mm)                                                                       |                |   |              |   |              |   |              |   |           |   |       |                                                                                                                                                                                                                                                                                                   |     |      |          |   |            |        |   |           |    |   |             |    |   |    |   |    |
| L                                                                                                                                                                                                                                                            | 3.20 +/-0.40                                                                         |                |   |              |   |              |   |              |   |           |   |       |                                                                                                                                                                                                                                                                                                   |     |      |          |   |            |        |   |           |    |   |             |    |   |    |   |    |
| W                                                                                                                                                                                                                                                            | 2.50 +/-0.30                                                                         |                |   |              |   |              |   |              |   |           |   |       |                                                                                                                                                                                                                                                                                                   |     |      |          |   |            |        |   |           |    |   |             |    |   |    |   |    |
| T                                                                                                                                                                                                                                                            | 2.00 +/-0.20                                                                         |                |   |              |   |              |   |              |   |           |   |       |                                                                                                                                                                                                                                                                                                   |     |      |          |   |            |        |   |           |    |   |             |    |   |    |   |    |
| B                                                                                                                                                                                                                                                            | 0.20 min.                                                                            |                |   |              |   |              |   |              |   |           |   |       |                                                                                                                                                                                                                                                                                                   |     |      |          |   |            |        |   |           |    |   |             |    |   |    |   |    |
| G                                                                                                                                                                                                                                                            | _____                                                                                |                |   |              |   |              |   |              |   |           |   |       |                                                                                                                                                                                                                                                                                                   |     |      |          |   |            |        |   |           |    |   |             |    |   |    |   |    |
| No.                                                                                                                                                                                                                                                          | Name                                                                                 | Material       |   |              |   |              |   |              |   |           |   |       |                                                                                                                                                                                                                                                                                                   |     |      |          |   |            |        |   |           |    |   |             |    |   |    |   |    |
| 1                                                                                                                                                                                                                                                            | Dielectric                                                                           | BaTiO3         |   |              |   |              |   |              |   |           |   |       |                                                                                                                                                                                                                                                                                                   |     |      |          |   |            |        |   |           |    |   |             |    |   |    |   |    |
| 2                                                                                                                                                                                                                                                            | Electrode                                                                            | Ni             |   |              |   |              |   |              |   |           |   |       |                                                                                                                                                                                                                                                                                                   |     |      |          |   |            |        |   |           |    |   |             |    |   |    |   |    |
| 3                                                                                                                                                                                                                                                            | Termination                                                                          | Cu             |   |              |   |              |   |              |   |           |   |       |                                                                                                                                                                                                                                                                                                   |     |      |          |   |            |        |   |           |    |   |             |    |   |    |   |    |
| 4                                                                                                                                                                                                                                                            |                                                                                      | Ni             |   |              |   |              |   |              |   |           |   |       |                                                                                                                                                                                                                                                                                                   |     |      |          |   |            |        |   |           |    |   |             |    |   |    |   |    |
| 5                                                                                                                                                                                                                                                            |                                                                                      | Sn             |   |              |   |              |   |              |   |           |   |       |                                                                                                                                                                                                                                                                                                   |     |      |          |   |            |        |   |           |    |   |             |    |   |    |   |    |

1 This datasheet is to be used for reference purposes only and is subject to change by TDK without notice.

It reflects an overview of the product characteristics/performance for the particular part number. For product specification information, please refer to TDK's general product specification. Please note that this standard part is not designed or warranted to meet any specifications of any intermediate or end user different from or in addition to the specifications set forth in TDK's general product specification. Note also that this standard part has not been specially designed or manufactured for, nor is it intended or warranted for use in, or permitted to be resold for, specialized applications such as aviation, medical, and/or governmental/military applications (collectively, "Excluded Applications").



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