## TDK MLCC DATASHEET

| C1005 | X6S | 0G  | 105 | М   | Т   | XXXX |
|-------|-----|-----|-----|-----|-----|------|
| (1)   | (2) | (3) | (4) | (5) | (6) | (7)  |

| NO. | SEGMENT                         | DETAIL                | COMMENTS   |  |  |
|-----|---------------------------------|-----------------------|--|--|--|
| (1) | Case Size (mm)                  | 1.0 x 0.5             | See below for dimensions                             |  |  |
| (2) | Temperature Characteristic      | -55°C to 105°C, ± 15% | Class II; Conforms to EIA 198                        |  |  |
| (3) | Rated Voltage (V)               | 4                     | DC   |  |  |
| (4) | Capacitance (pF)                | 1,000,000             | 1st & 2nd are significant figures; 3rd is multiplier |  |  |
| (5) | Capacitance Tolerance (%) or pF | ± 20%                 | Conforms to IEC 384-9                                |  |  |
| (6) | Packaging Information           | Tape and Reel         | EIA 481 format                                       |  |  |
| (7) | TDK Internal Code               | XXXX                  | (Internal TDK use only)                              |  |  |
| -   | Quality Factor (Q)              | -                     | -  |  |  |
| -   | Dissipation Factor (DF)         | 10.0% Max             | 1.0 ± 0.2 Vrms , 1kHz ± 10%                          |  |  |
| -   | Insulation Resistance           | 450 MΩ Min            | Apply rated voltage for 60 seconds at 25°C           |  |  |

Condition for life : Apply rated voltage at maximum operating temperature ±2°C for 1,000 +48,-0hr.

| PHYSICAL DIMENSIONS |                  |     | MATERIAL SYSTEM |          |              |  |  |
|---------------------|------------------|-----|-----------------|----------|--------------|--|--|
|                     |                  |     |                 |          |              |  |  |
| SYMBOL              |                  | NO. | NAME            | MATERIAL |              |  |  |
| STIVIBUL            | DIMENSIONS (mm)  | NO. | INAIVIE         | CLASS I  | CLASS II/III |  |  |
| L                   | 1.00 +/-0.05     | (1) | Dielectric      | CaZrO3   | BaTiO3       |  |  |
| W                   | 0.50 +/-0.05     | (2) | Electrode       | Ni       | Ni           |  |  |
| Т                   | 0.50 +/-0.05     | (3) |                 | Cu       | Cu           |  |  |
| В                   | 0.25 +0.05,-0.10 | (4) | Termination     | Ni       | Ni           |  |  |
| G                   | 0.35 MIN.        | (5) |                 | Sn       | Sn           |  |  |

<sup>1</sup> 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"). Picture of capacitor is for illustration only and may not reflect the product's actual appearance.

