

## J01A101N221J15T



|   |    |   |     |   |     |   |    |   |
|---|----|---|-----|---|-----|---|----|---|
| J | 01 | A | 101 | N | 221 | J | 15 | T |
|---|----|---|-----|---|-----|---|----|---|

|     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|

### (1) Company title

| Company title      |
|--------------------|
| J SHANGHAI JEMLEAD |

### (2) Product

| Product Code                 |
|------------------------------|
| 01 MULTILAYER CHIP CAPACITOR |

### (3) AEC-Q200

| Code | AEC-Q |
|------|-------|
| A    | YES   |

### (4) Rated Voltage

| Code | Rated Voltage(Vdc) |
|------|--------------------|
| 101  | 100                |

### (5) Temperature Characteristics

| Code | Temperature Characteristics | Temperature Range |
|------|-----------------------------|-------------------|
| N    | NPO                         | -55 °Cto +125 °C  |

### (6) Capacitance

| Code | Capacitance Range |
|------|-------------------|
| 221  | 220pF             |

### (7) Capacitance Tolerance

| Code | Tolerance |
|------|-----------|
| J    | ±5%       |

### (8) Chip Size

| Code | Length*Width |
|------|--------------|
| 15   | 2.0 * 1.25   |

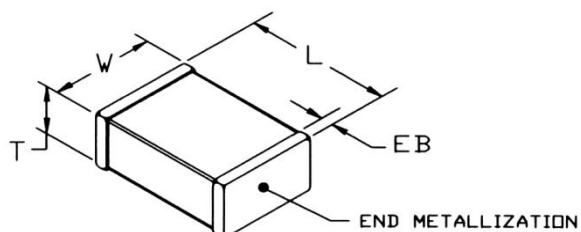
### (9) Tapping

| Code | Type            |
|------|-----------------|
| T    | PAPER TAPE/REEL |

### \*Supplement

| Test Parameters            |
|----------------------------|
| 1 MHz±50KHz, Values≤ 100pF |
| 1 KHz±50Hz, Values > 100pF |
| @ 1.0 VRMS, 25°C           |

## Dimensions And Structure



### Mechanical Characteristics

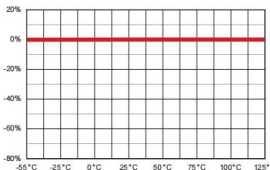
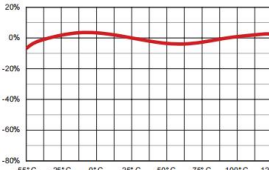
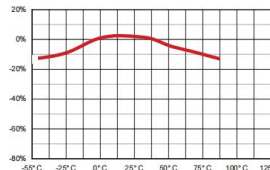
Unit: mm

| LENGTH "L" | WIDTH"W" | THICKNESS"T" | ENDBAND"EB" |
|------------|----------|--------------|-------------|
| 2.0±0.2    | 1.25±0.2 | 0.8±0.15     | 0.50±0.2    |

## Electrical Characteristics

|                         |                                                                                                                  |
|-------------------------|------------------------------------------------------------------------------------------------------------------|
| Temperature coefficient | 0±30ppm / °C<br>(-55°C TO +125°C)                                                                                |
| Dissipation Factor      | 0.1% Max, 25°C                                                                                                   |
| Insulation Resistance   | > 1000 Ohm-Farad OR 100 G-Ohms,<br>whichever is less @ WVDC, 25°C<br>( @ 125°C IR is 10% of 25°C<br>requirement) |
| Dielectric Strength     | 2.5 X WVDC, 50 mA max                                                                                            |

## Electrical Characteristics

| PARAMETER                | NP0                                                                                                                                                                                                                                                        |               | X7R                                                                                          |               | X5R                                                                                  |              |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------------------------------------------------------------------------------------|---------------|--------------------------------------------------------------------------------------|--------------|
| TEMPERATURE COEFFICIENT: | 0± 30 ppm/°C                                                                                                                                                                                                                                               | -55 to +125°C | ± 15%                                                                                        | -55 to +125°C | ± 15%                                                                                | -55 to +85°C |
|                          |                                                                                                                                                                          |               |            |               |  |              |
| DISSIPATION FACTOR:      | .001 (0.1%) max                                                                                                                                                                                                                                            |               | WVDC ≥ 50 VDC, DF = 2.5% max<br>WVDC = 25 VDC, DF = 3.0% max<br>WVDC = 16 VDC, DF = 3.5% max |               | For Vrated ≥ 50 VDC, DF = 5% max<br>For Vrated ≤ 25 VDC: DF = 10% max                |              |
| AGING:                   | None                                                                                                                                                                                                                                                       |               | 2.5% / decade hour                                                                           |               | 2.5 % / decade hour                                                                  |              |
| INSULATION RESISTANCE:   | 1000ΩF or 100GΩ<br>whichever is less @ 25°C, WVDC                                                                                                                                                                                                          |               | 500ΩF or 50GΩ<br>whichever is less @ 25°C, WVDC                                              |               | 100ΩF or 10GΩ<br>whichever is less @ 25°C, WVDC                                      |              |
| DIELECTRIC STRENGTH:     | For Vrated = 6 - 200 VDC, DWV = 2.5 X WVDC, 25°C, 50mA max.<br>For Vrated = 201 - 499 VDC, DWV = 2.0 X WVDC, 25°C, 50mA max.<br>For Vrated = 500 - 999 VDC, DWV = 1.5 X WVDC, 25°C, 50mA max.<br>For Vrated = 1000+ VDC, DWV = 1.2 X WVDC, 25°C, 50mA max. |               |                                                                                              |               | DWV = 2.5 X WVDC, 25°C, 50mA max.                                                    |              |
| TEST PARAMETERS:         | C > 100 pF; 1kHz ±50Hz; 1.0±0.2 VRMS<br>C ≤ 100 pF 1Mhz ±50kHz; 1.0±0.2 VRMS                                                                                                                                                                               |               | 1kHz ±50Hz; 1.0±0.2 VRMS                                                                     |               | 1kHz ±50Hz; 0.5±0.2 VRMS                                                             |              |
| NOTES:                   | Tanceram IR = 100 ΩF or 10 GΩ<br>Tanceram DF for Vrated ≥ 50 VDC = 5% max.<br>Tanceram DF for Vrated ≤ 25 VDC, DF = 10% max                                                                                                                                |               |                                                                                              |               |                                                                                      |              |