

J01A500N120J07T



| | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| J | 01 | A | 500 | N | 120 | J | 07 | 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) |
|------|--------------------|
| 500 | 50 |

(5) Temperature Characteristics

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

(6) Capacitance

| Code | Capacitance Range |
|------|-------------------|
| 120 | 12pF |

(7) Capacitance Tolerance

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

(8) Chip Size

| Code | Length*Width |
|------|--------------|
| 07 | 1.00 * 0.50 |

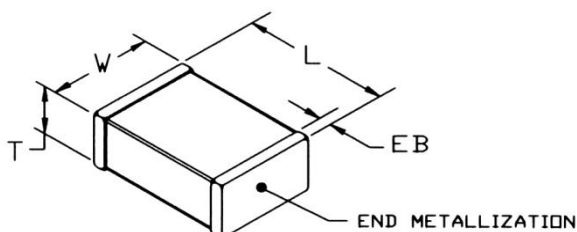
(9) Tapping

| 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

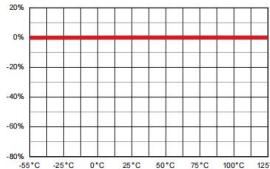
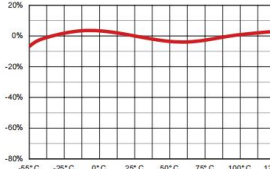
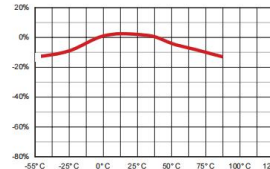
Unit: mm

| LENGTH "L" | WIDTH"W" | THICKNESS"T" | ENDBAND"EB" |
|------------|-----------|--------------|-------------|
| 1.00±0.05 | 0.50±0.05 | 0.50±0.10 | 0.25±0.10 |

Electrical Characteristics

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

Electrical Characteristics

| PARAMETER | NPO | | X7R | | X5R | |
|--------------------------|--|---------------|--|---------------|--|--------------|
| | 0± 30 ppm/°C | -55 to +125°C | ± 15% | -55 to +125°C | ± 15% | -55 to +85°C |
| TEMPERATURE COEFFICIENT: |  | |  | |  | |
| DISSIPATION FACTOR: | .001 (0.1%) max | | WVDC ≥ 50 VDC, DF = 2.5% max WVDC = 25 VDC, DF = 3.0% max WVDC = 16 VDC, DF = 3.5% max | | For Vrated ≥ 50 VDC, DF = 5% max For Vrated ≤ 25 VDC: DF = 10% max | |
| AGING: | None | | 2.5% / decade hour | | 2.5 % / decade hour | |
| INSULATION RESISTANCE: | 1000ΩF or 100GΩ whichever is less @ 25°C, WVDC | | 500ΩF or 50GΩ whichever is less @ 25°C, WVDC | | 100ΩF or 10GΩ whichever is less @ 25°C, WVDC | |
| DIELECTRIC STRENGTH: | For Vrated = 6 - 200 VDC, DWV = 2.5 X WVDC, 25°C, 50mA max. For Vrated = 201 - 499 VDC, DWV = 2.0 X WVDC, 25°C, 50mA max. For Vrated = 500 - 999 VDC, DWV = 1.5 X WVDC, 25°C, 50mA max. 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 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 Tanceram DF for Vrated ≥ 50 VDC = 5% max. Tanceram DF for Vrated ≤ 25 VDC, DF = 10% max | | | | | |