

CF1022

**869.5 MHz
LTCC Filter**

**Package
Dimensions
1.0 x 0.5 mm**

MAXIMUM RATING:

1. Operating temperature range: -40°C to +85°C
2. Storage temperature range: -40 °C to +85 °C
3. Moisture Sensitive Level: Level 1 (MSL1)

ELECTRICAL CHARACTERISTICS:

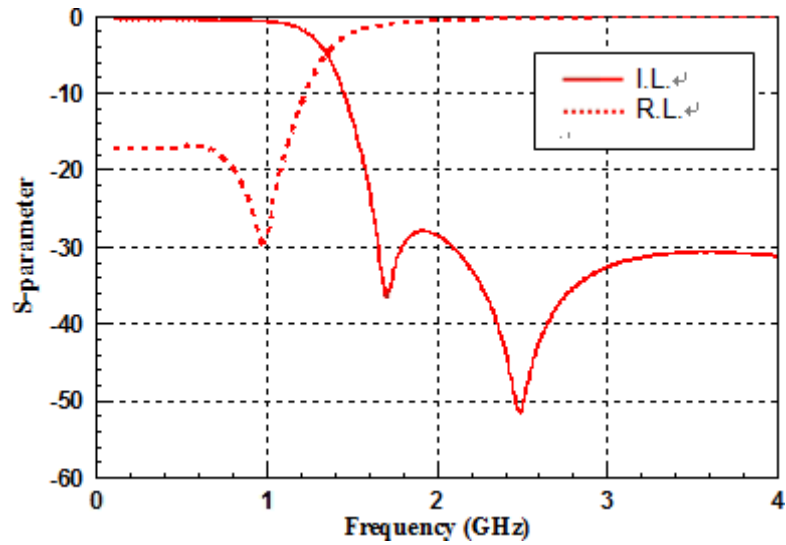
Source impedance (unbalanced) : $Z_s = 50 \Omega$

Load Impedance (balanced) : $Z_L = 50 \Omega$

| Item | | Unit | Spec |
|--|---------------|------|----------------|
| Frequency Range | | MHz | 824~915(869.5) |
| Insertion loss | +25°C | dB | 0.65 Max |
| | -40°C ~ +85°C | dB | 0.85 Max |
| Attenuation (Reference level from 0 Db) | | | |
| 1648 ~ 1830 MHz | | dB | 25 Min |
| 2472 ~ 2745 MHz | | dB | 25 Min |
| 3296 ~ 3660 MHz | | dB | 25 Min |
| VSWR | | | 2.0 Max |

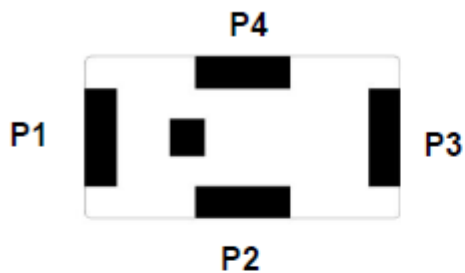
FREQUENCY CHARACTERISTICS:

Frequency Response



Outline Drawing:

CONSTRUCTION

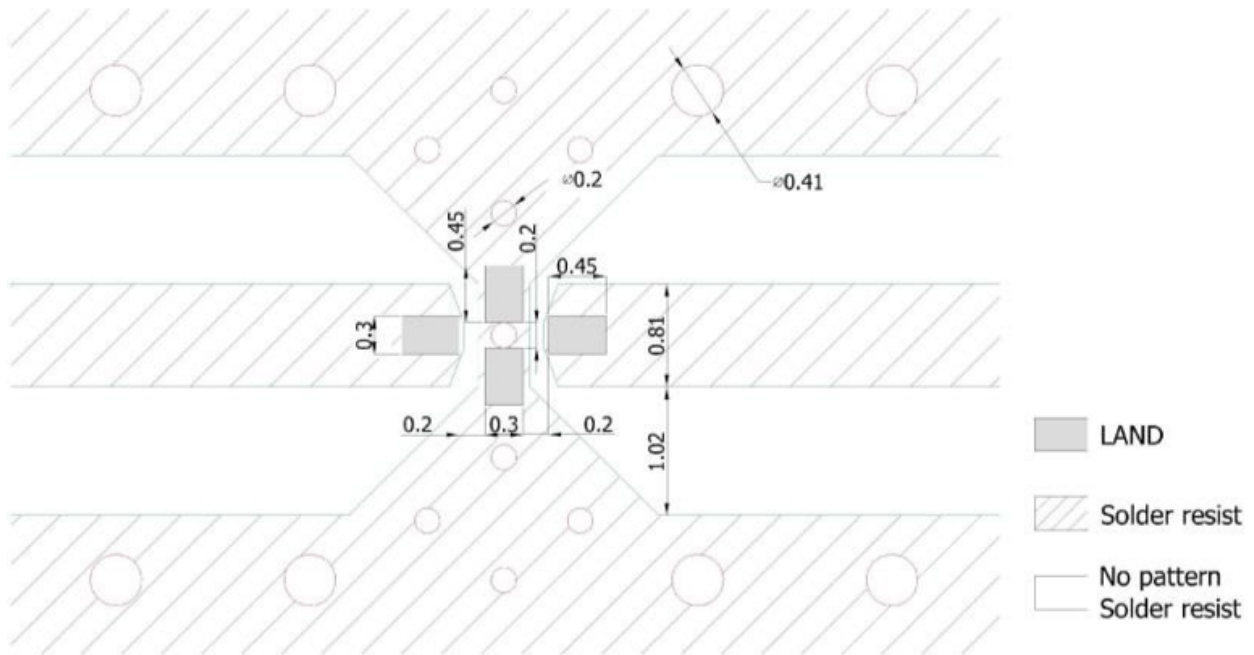


| PIN | Connection |
|-----|-------------|
| 1 | Input port |
| 2 | GND |
| 3 | Output port |
| 4 | GND |

DIMENSIONS

| Figure | Symbol | Dimension (mm) |
|--------|-------------|----------------|
| | L | 1.00 ± 0.10 |
| | W | 0.50 ± 0.10 |
| | T | 0.40 ± 0.10 |
| | A | 0.35 ± 0.10 |
| | B | 0.30 ± 0.10 |
| | C | 0.15 ± 0.10 |
| | D | 0.15 ± 0.10 |
| E | 0.30 ± 0.10 | |

PCB Footprint:

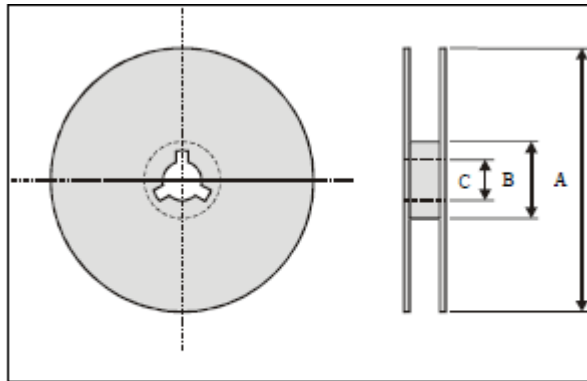


Unit : mm

Line width to be designed to match 50 Ω characteristic impedance, depending on PCB material and thickness.

PACKING:

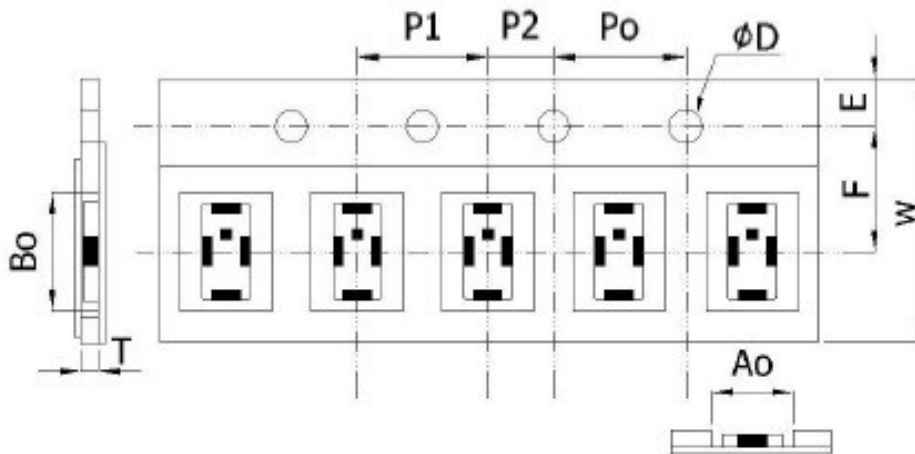
1. REEL DIMENSION (4000 PCS)



| | | | |
|----------------|--------|-------|-------|
| Index | A | B | C |
| Dimension (mm) | Φ178.0 | Φ60.0 | Φ13.0 |

2. TAPE

DIMENSION (unit :mm)

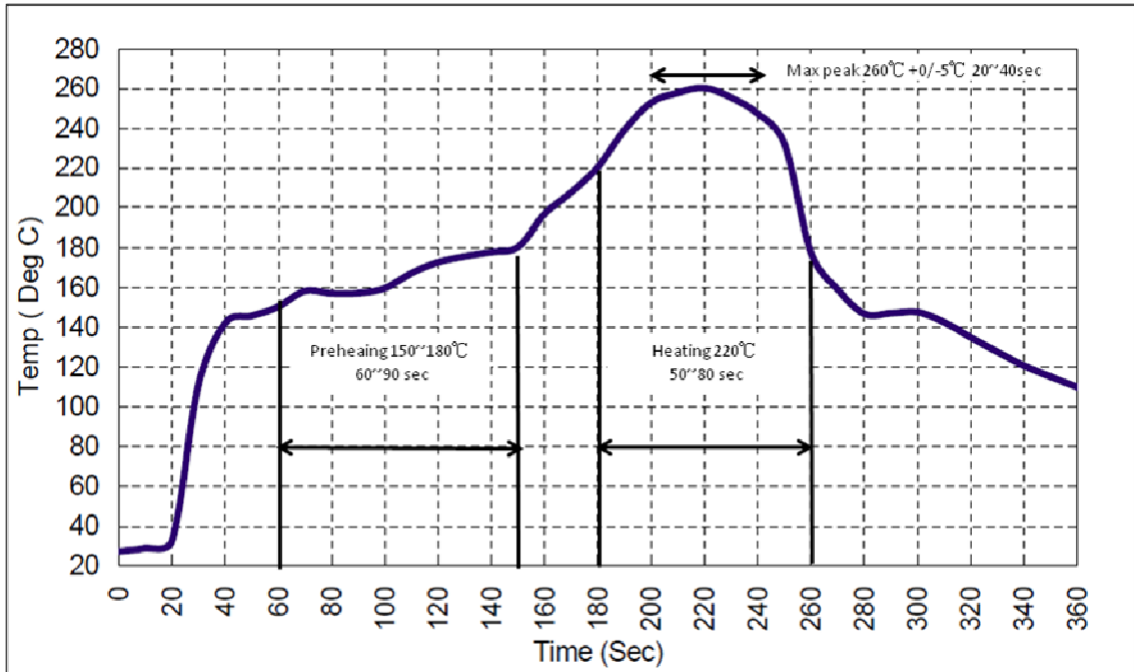


Paper Tape specifications (unit :mm)

| | | | | | |
|----------------|----------------|----------------|----------------|----------------|----------------|
| Index | A ₀ | B ₀ | ΦD | T | W |
| Dimension (mm) | 0.67 ± 0.10 | 1.14 ± 0.10 | 1.50 ± 0.10 | 0.42 ± 0.10 | 8.0 ± 0.30 |
| Index | E | F | P ₀ | P ₁ | P ₂ |
| Dimension (mm) | 1.75 ± 0.10 | 3.50 ± 0.20 | 4.00 ± 0.10 | 2.00 ± 0.10 | 2.00 ± 0.10 |

RECOMMENDED REFLOW PROFILE:

1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50~80 seconds and at 245~260°C peak (min. 10sec).
4. Time : 2 times.



CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.