

# 深圳市森科泰电子有限公司

## 产品规格书

# SPECIFICATION

**DESCRIPTION**     **Chip Antenna**

**PART NO.**         **SKT321606-CD-01-R**

**VERSION**         **V2.1**

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# 1. Naming Rules

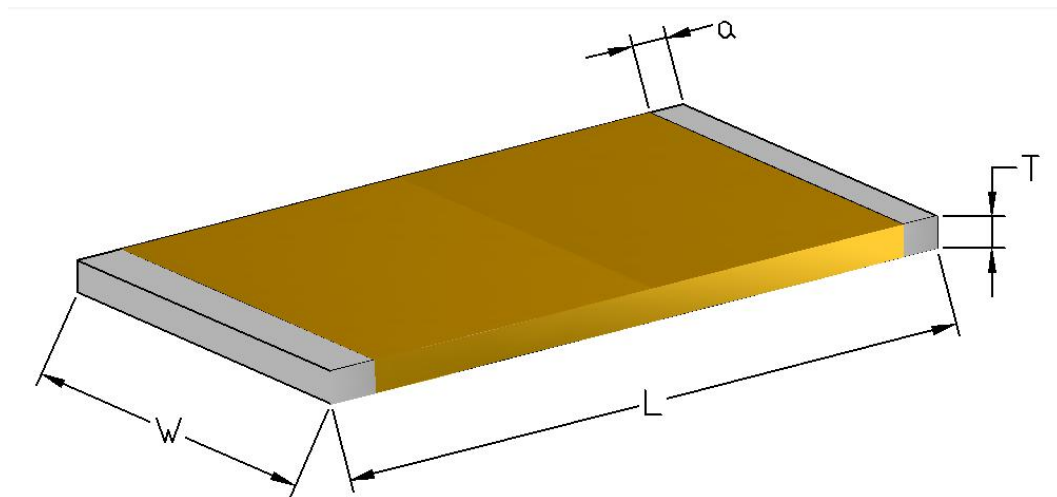
## Type: SKT-ABCDEF-GH-IJ-K

1. SKT:     Shortcut for Thinkte
2. ABCDEF: AB: Length(mm)   CD: Width(mm)  
                    For example: 502010   5.0mm\*2.0mm
3. G:       Material (C- Ceramic    P-Polymer)
4. H:       Feeding (S- Single   D - Dual)
5. I J:      Version (01 - 99)
6. K:       Package (R - Reel, T - Tape)

## 2. Antenna Specification

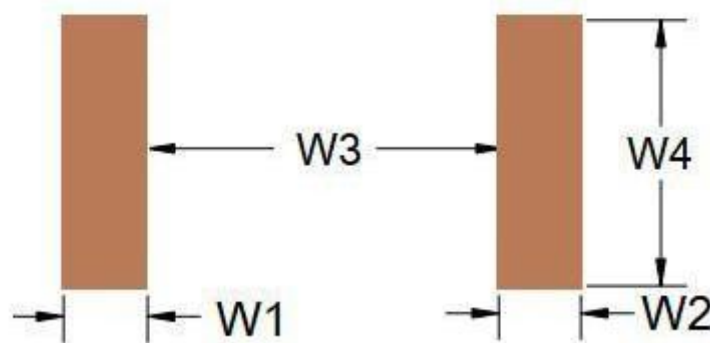
|                                                |                            |
|------------------------------------------------|----------------------------|
| <b>Outline Dimensions</b>                      | <b>3.2x1.6x0.6(mm)</b>     |
| <b>Ground Plane</b>                            | <b>3.2x1.6(mm)</b>         |
| <b>Frequency Range</b>                         | <b>2.4GHz ~ 2.5GHz</b>     |
| <b>Impedance</b>                               | <b>50 Ohm Nominal</b>      |
| <b>Bandwidth</b><br>( under -10dB return loss) | <b>110MHz (Typ.)</b>       |
| <b>Radiation</b>                               | <b>Omni-directional</b>    |
| <b>Peak Gain</b>                               | <b>1.75 dBi (Typ.)</b>     |
| <b>Efficiency</b>                              | <b>60% (Typ.)</b>          |
| <b>Polarization</b>                            | <b>Linear Polarization</b> |
| <b>Storage Temp</b>                            | <b>-40℃ ~ +85℃</b>         |
| <b>Color</b>                                   | <b>Brown</b>               |

### 3. Antenna Dimension



| Type    | L           | W           | T           | a           |
|---------|-------------|-------------|-------------|-------------|
| SKT3216 | 3.2<br>±0.2 | 1.6<br>±0.2 | 0.6<br>±0.2 | 0.4<br>±0.2 |

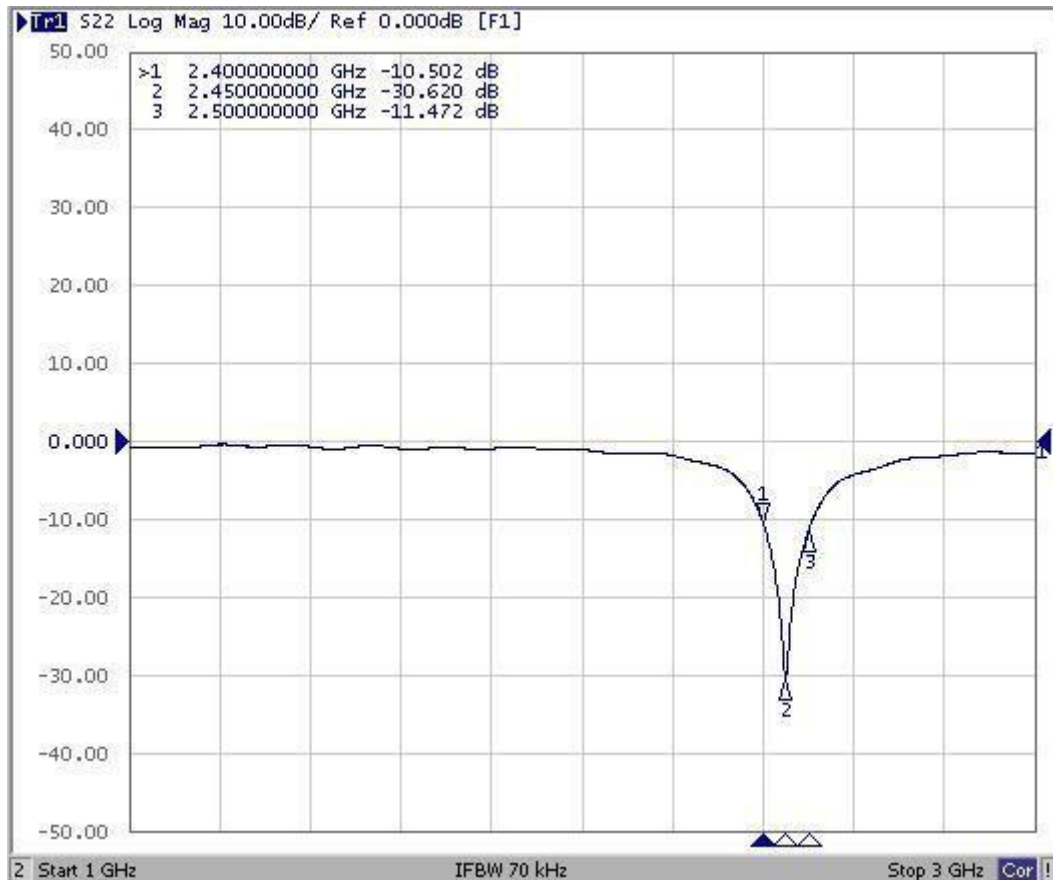
FootPrint (Unit : mm)



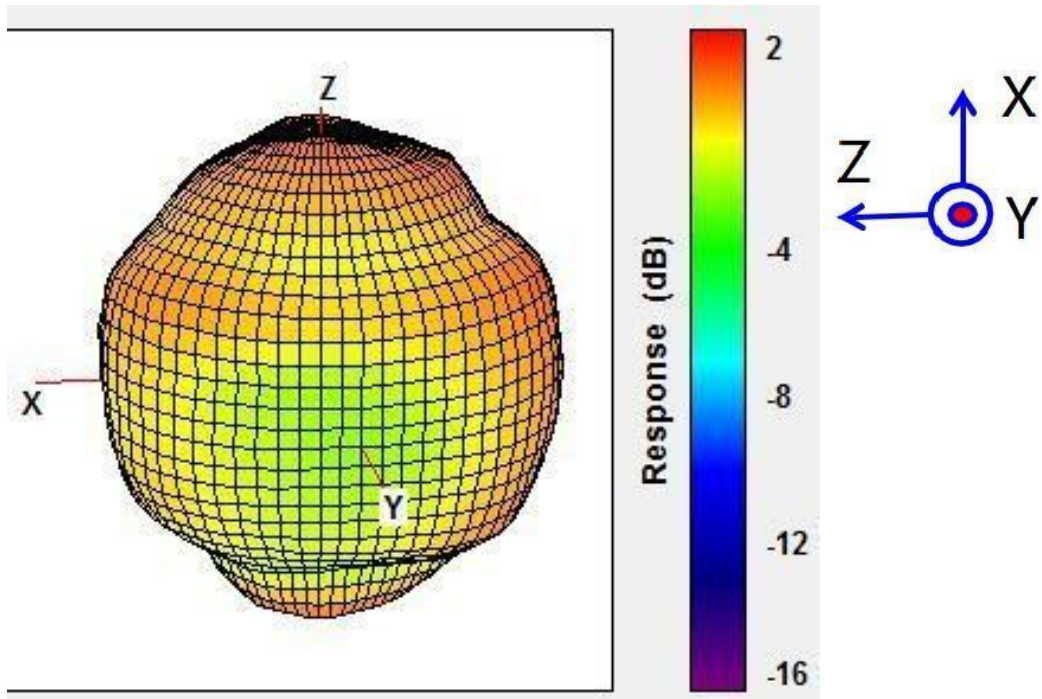
| Type    | W1          | W2          | W3          | W4          |
|---------|-------------|-------------|-------------|-------------|
| SKT3216 | 0.4<br>±0.2 | 0.4<br>±0.2 | 2.4<br>±0.2 | 1.6<br>±0.2 |

## 4. Test Data:

### 3.1 ELECTRICAL CHARACTERISTICS

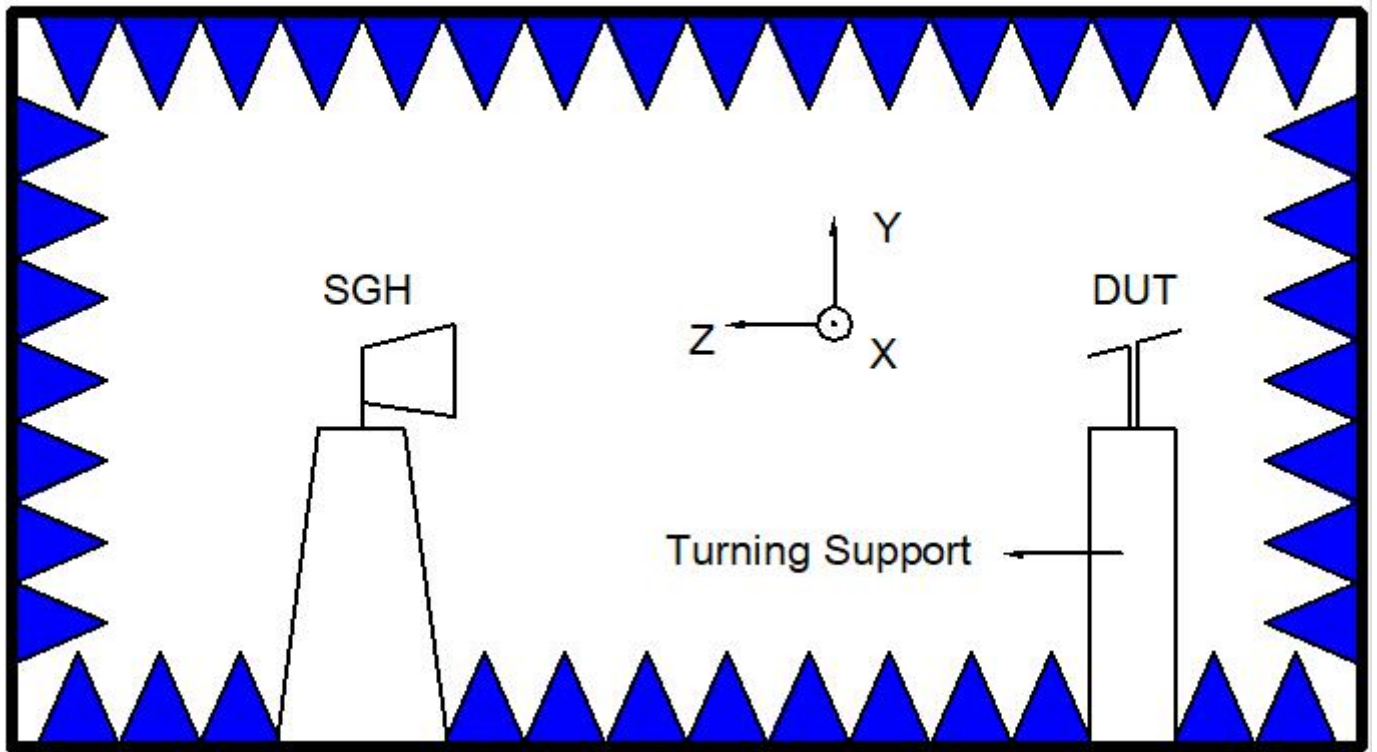


### 3.2 Radiation Pattern



|         | Efficiency | Peak Gain | Directivity |
|---------|------------|-----------|-------------|
| 2400MHz | 57.45%     | 1.3 dBi   | 2.45 dBi    |
| 2450MHz | 60.65%     | 1.75dBi   | 2.89 dBi    |
| 2500MHz | 56.75%     | 1.45dBi   | 2.23 dBi    |

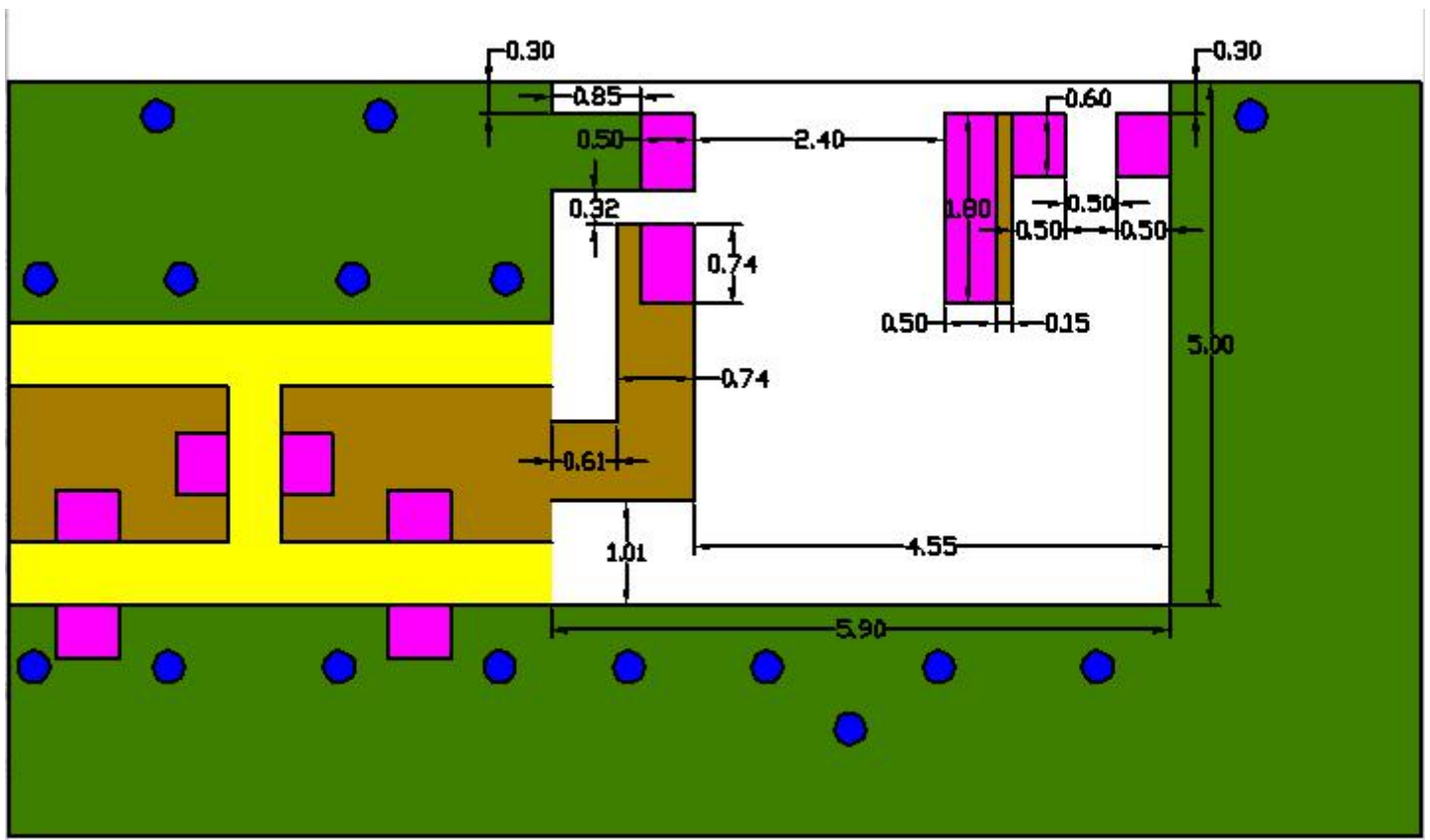
## Chamber Coordinate System



## 5. LayoutGuide:

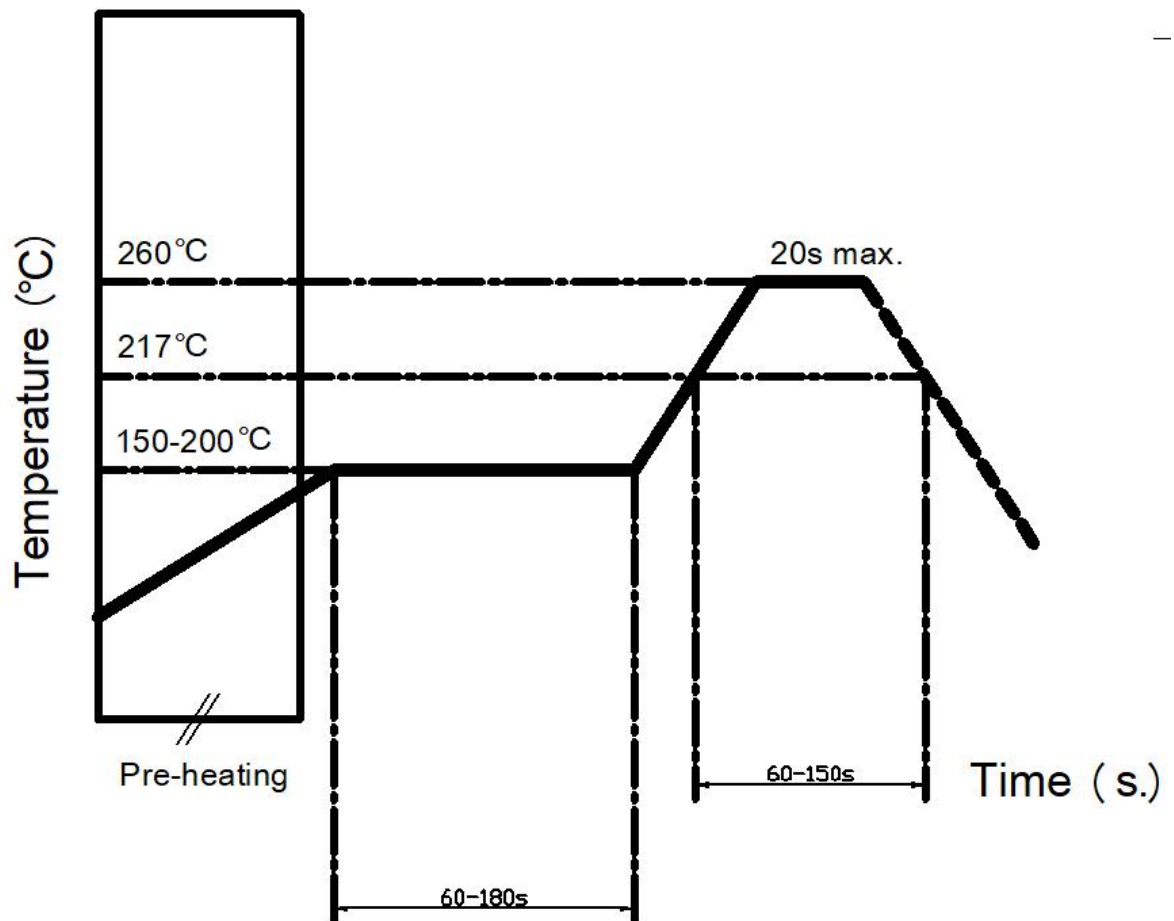
### Solder Land Pattern:

Land pattern for soldering (black marking areas) is as shown below. Matching circuit is needed for good performance, when customer's device is different.



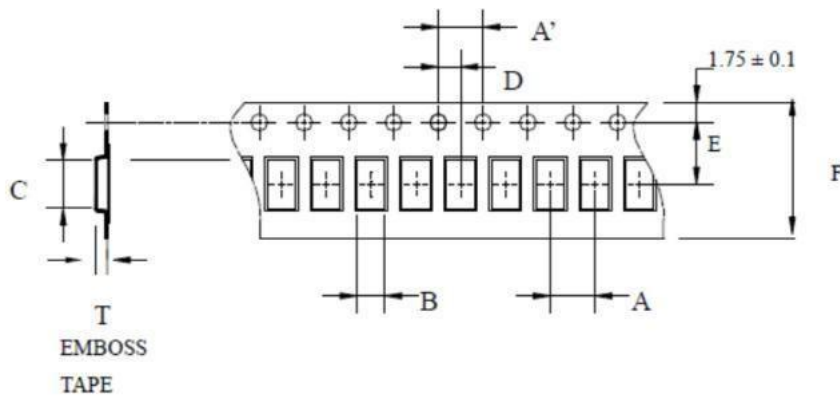
## 6.Soldering Conditions:

Typical Soldering Profile for Lead-free Process



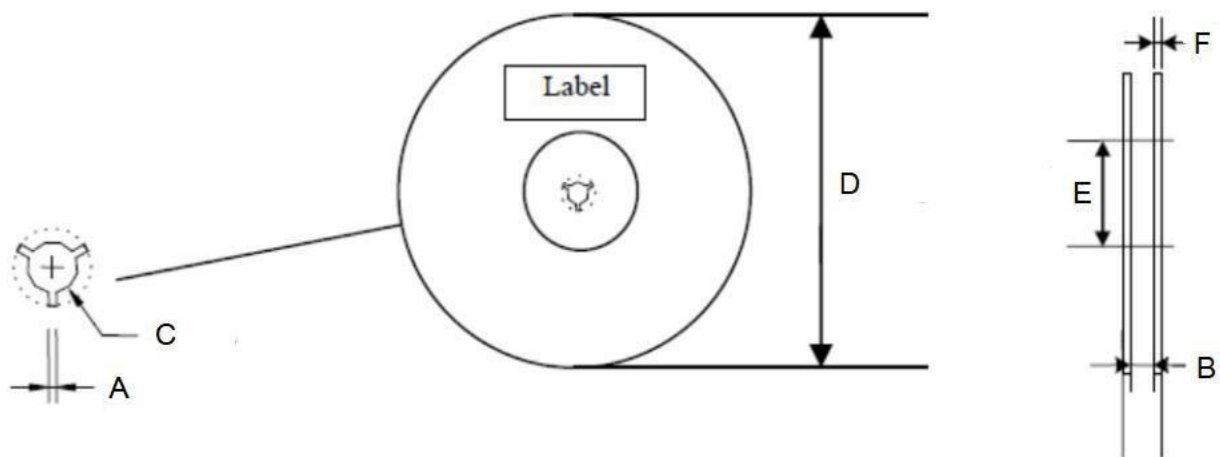
## 7. Taping Specifications:

Tape Dimensions (Unit: mm) & Quantity



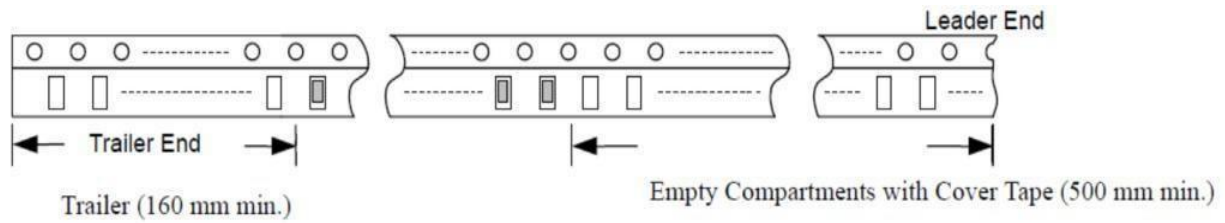
| Type    | A           | A'          | B            | C            | D            | E           | F           | T            | Quantity/<br>Reel | Type<br>Material      |
|---------|-------------|-------------|--------------|--------------|--------------|-------------|-------------|--------------|-------------------|-----------------------|
| SKT3216 | 4.0<br>±0.1 | 4.0<br>±0.1 | 1.95<br>±0.1 | 3.50<br>±0.1 | 2.0<br>±0.05 | 3.5<br>±0.1 | 8.0<br>±0.1 | 0.85<br>±0.1 | 4,000pcs          | Plastic<br>(Embossed) |

Reel Dimensions (Unit: mm)



| Type    | A           | B          | C            | D         | E        | F           |
|---------|-------------|------------|--------------|-----------|----------|-------------|
| SKT3216 | 2.3<br>±0.5 | 17<br>±0.5 | 13.5<br>±0.5 | 178<br>±1 | 75<br>±3 | 1.4<br>±0.2 |

## Leader and Trailer Tape



### Soldering Conditions:

- (1) Temperature: 5~35°C, relative humidity (RH): 45~75%.
- (2) Non-corrosive environment