



# 深圳市弗瑞鑫电子有限公司

## 规格承认书

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|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|  |  |  |  |

|         |  |
|---------|--|
| prepare |  |
|         |  |
| check   |  |
|         |  |
| approve |  |
|         |  |




TRX电容一级代理商

深圳市弗瑞鑫电子有限公司

Add:深圳市宝安区西乡大道302号金源商务大厦B座3楼

Tel:0755-29563634

Fax:0755-27447020

|                                                                                                       |                                       |        |        |            |
|-------------------------------------------------------------------------------------------------------|---------------------------------------|--------|--------|------------|
|  <b>TRX</b><br>专注电容器廿年 | <b>SMD Y</b>                          |        |        |            |
|                                                                                                       | <b>SMD Y1 a.c. ceramic capacitors</b> |        |        |            |
|                                                                                                       | /Number                               | -3-079 | /Date  | 2022-03-10 |
| /Edition                                                                                              | A5                                    | /Page  | P 3 18 |            |

1/ attached sheet I

/

| C  | OME P.N. | P.N.    | P                  | P         |        |
|----|----------|---------|--------------------|-----------|--------|
| 1  | /        | M 1100J | MD- 1 L100J/AC400  | 7854      |        |
| 2  | /        | M 1220J | MD- 1 L220J/AC400  | 7854      |        |
| 3  | /        | M 1470J | MD- 1 L470J/AC400  | 7854      |        |
| 4  | /        | M 1680J | MD- 1 L680J/AC400  | 7854      |        |
| 5  | /        | M 1101K | MD- 1 5P101K/AC400 | 7854      |        |
| 6  | /        | M 1221K | MD- 1 5P221K/AC400 | 7854      |        |
| 7  | /        | M 1271K | MD- 1 5P271K/AC400 | 7854      |        |
| 8  | /        | M 1331K | MD- 1 5P331K/AC400 | 7854      |        |
| 9  | /        | M 1471K | MD- 1 5P471K/AC400 | 7854      |        |
| 10 | /        | M 1471M | MD- 1 5 471M/AC400 | 7854      |        |
| 11 | /        | M 1681M | MD- 1 5 681M/AC400 | 7854      |        |
| 12 | /        | M 1102M | MD- 1 5 102M/AC400 | 7854      |        |
| 13 | /        | M 1152M | MD- 1 5 152M/AC400 | 7854      |        |
| 14 | /        | M 1222M | MD- 1 5 222M/AC400 | 7854      |        |
|    |          | L       | CLA I              | 5P/ 5 / 5 | CLA II |

2/ attached sheet II

**TRX SMD-Y1.CAP**

**Capacitance Range and T.C Differentiation Unit:pF**

1

1 AC :

| .C      | 10          | 22 | 47 | 68 | 100 | 150 | 220 | 270 | 330 | 470 | 680 | 1000 | 1500 | 2200 |
|---------|-------------|----|----|----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| L       |             |    |    |    |     |     |     |     |     |     |     |      |      |      |
| 2B( 5P) |             |    |    |    |     |     |     |     |     |     |     |      |      |      |
| 2E( 5 ) |             |    |    |    |     |     |     |     |     |     |     |      |      |      |
| 2F( 5 ) |             |    |    |    |     |     |     |     |     |     |     |      |      |      |
|         | 400 .       |    |    |    |     |     |     |     |     |     |     |      |      |      |
| O       | -40 125     |    |    |    |     |     |     |     |     |     |     |      |      |      |
| C       | 40/ 125/ 21 |    |    |    |     |     |     |     |     |     |     |      |      |      |


1000

100H

A AC :


100H .

1000 . ,

|                                                                                                       |                                       |        |       |            |
|-------------------------------------------------------------------------------------------------------|---------------------------------------|--------|-------|------------|
|  <b>TRX</b><br>专注电容器廿年 | <b>SMD Y</b>                          |        |       |            |
|                                                                                                       | <b>SMD Y1 a.c. ceramic capacitors</b> |        |       |            |
|                                                                                                       | /Number                               | -3-079 | /Date | 2022-03-10 |
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## /CON EN

|     |   |   |       |       |
|-----|---|---|-------|-------|
| 1.  | P | N | ----- | 5     |
| 2.  | P |   | ----- | 5-6   |
| 3.  | D |   | ----- | 6     |
| 4.  | C |   | ----- | 7     |
| 5.  | P |   | ----- | 7-8   |
| 6.  |   |   | ----- | 8-9   |
| 7.  | P |   | ----- | 9-14  |
| 8.  | C |   | ----- | 14    |
| 9.  | C |   | ----- | 15    |
| 10. |   |   | ----- | 15    |
| 11. | P | P | ----- | 16-17 |
| 12. | A |   | ----- | 18    |

|                                                                                 |                                       |        |       |            |
|---------------------------------------------------------------------------------|---------------------------------------|--------|-------|------------|
|  | <b>SMD Y</b>                          |        |       |            |
|                                                                                 | <b>SMD Y1 a.c. ceramic capacitors</b> |        |       |            |
|                                                                                 | /Number                               | -3-079 | /Date | 2022-03-10 |
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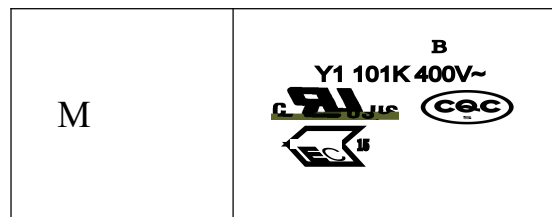
**1. /Product Name**

T M Y1 101 K  
 ① ② ③ ④ ⑤


| N . | C   | E                                           |
|-----|-----|---------------------------------------------|
| ①   |     |                                             |
| ②   | M   | P (7854)<br>(7854)                          |
| ③   | 1   |                                             |
| ④   | 101 | C<br><br>( : 101=10 10 <sup>1</sup> =100 F) |
| ⑤   | K   | /C<br>J( 5%) / K( 10%) / M( 20%)            |






!

**2. /Product marking**




|    |          |                 |
|----|----------|-----------------|
|    | /D       | <u>MB010806</u> |
| M  | 2020 ( ) | 2020(B) );      |
| B  | H        |                 |
| 01 | M N ( )  |                 |
| 08 | 8 01-12  | A (01-12)       |
| 06 | 6 01-31  | 6 (01-31)       |

|                                                                                                       |                                       |        |        |
|-------------------------------------------------------------------------------------------------------|---------------------------------------|--------|--------|
|  <b>TRX</b><br>专注电容器廿年 | <b>SMD Y</b>                          |        |        |
|                                                                                                       | <b>SMD Y1 a.c. ceramic capacitors</b> |        |        |
|                                                                                                       | /Number                               | -3-079 | /Date  |
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| /Explanation                                                                        |                                     |
|-------------------------------------------------------------------------------------|-------------------------------------|
|    | / /                                 |
| B                                                                                   | / D<br>L / B( 5P) / E( 5 ) / F( 5 ) |
| 1                                                                                   |                                     |
| 101                                                                                 | / C<br>(10-2200 F : 100-222)        |
| K                                                                                   | / C<br>J( 5%) / K( 10%) / M( 20%)   |
| 400                                                                                 | L C C ENEC<br>L C C ENEC            |
|    | L                                   |
|    | C C                                 |
|   | ENEC                                |
|  | KC                                  |
| 250                                                                                 | KC<br>KC                            |
| MB010806                                                                            | D                                   |

3. /Date code

|      |   | 2020 | M | 1  | 01 | 1  | 01 | 16 | 16 |
|------|---|------|---|----|----|----|----|----|----|
|      |   | 2021 | N | 2  | 02 | 2  | 02 | 17 | 17 |
| 2010 | A | 2022 | P | 3  | 03 | 3  | 03 | 18 | 18 |
| 2011 | B | 2023 |   | 4  | 04 | 4  | 04 | 19 | 19 |
| 2012 | C | 2024 |   | 5  | 05 | 5  | 05 | 20 | 20 |
| 2013 | D | 2025 |   | 6  | 06 | 6  | 06 | 21 | 21 |
| 2014 | E | 2026 |   | 7  | 07 | 7  | 07 | 22 | 22 |
| 2015 | F | 2027 |   | 8  | 08 | 8  | 08 | 23 | 23 |
| 2016 | H | 2028 |   | 9  | 09 | 9  | 09 | 24 | 24 |
| 2017 | J | 2029 |   | 10 | 10 | 10 | 10 | 25 | 25 |
| 2018 | K |      |   | 11 | 11 | 11 | 11 | 26 | 26 |
| 2019 | L |      |   | 12 | 12 | 12 | 12 | 27 | 27 |
|      |   |      |   |    |    | 13 | 13 | 28 | 28 |
|      |   |      |   |    |    | 14 | 14 | 29 | 29 |
|      |   |      |   |    |    | 15 | 15 | 30 | 30 |
|      |   |      |   |    |    |    |    | 31 | 31 |

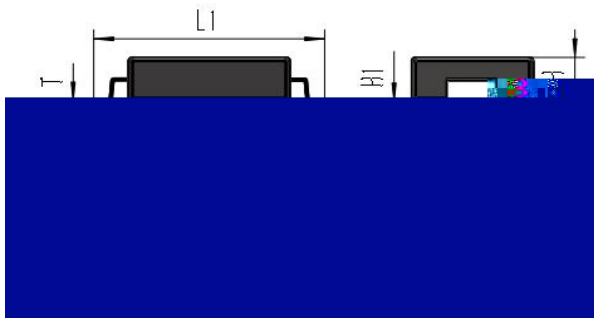
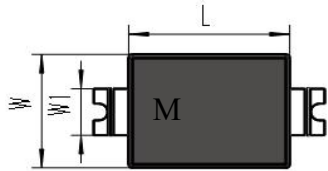
|                                                                                                       |                                       |        |        |
|-------------------------------------------------------------------------------------------------------|---------------------------------------|--------|--------|
|  <b>TRX</b><br>专注电容器廿年 | <b>SMD Y</b>                          |        |        |
|                                                                                                       | <b>SMD Y1 a.c. ceramic capacitors</b> |        |        |
|                                                                                                       | /Number                               | -3-079 | /Date  |
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**4. /Certificates**

| certificates |                         |                |                 |
|--------------|-------------------------|----------------|-----------------|
| C            |                         | C              | C               |
| L/C L        | L/C A 60384-14          | E315719        | AC400 ( . . . ) |
| C C          | GB/ 6346.14-2015        | C C17001176740 | AC400 ( . . . ) |
| ENEC         | EN60384-14:2013/A1:2016 | ENEC-02084     | AC400 ( . . . ) |
| KC           | KC 60384-14             | 03127-21001    | AC250 ( . . . ) |

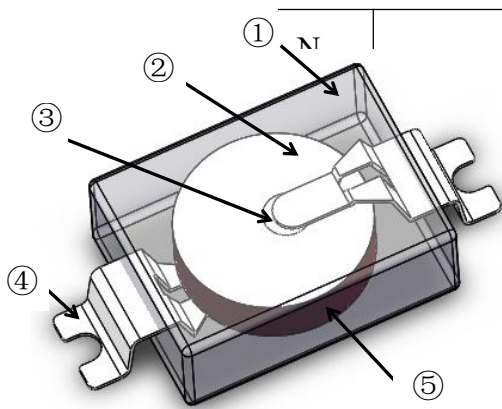
**5. /Product structure**

5.1 /P D



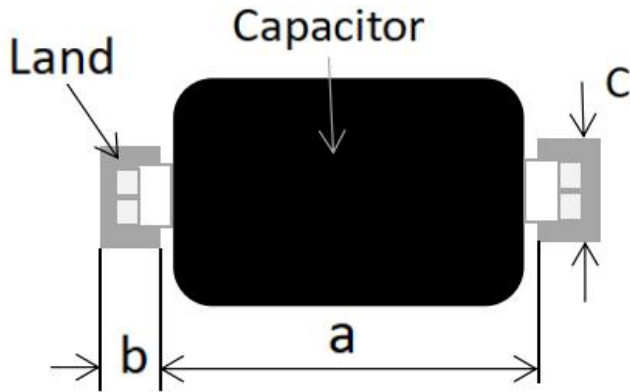
|    | P                   | D  | ( )       |
|----|---------------------|----|-----------|
| L  | 7.8 0.1             | 1  | 2.5 0.05  |
|    | 5.4 0.1             |    | 0.13 0.02 |
| H  | 2.45                | H1 | 0.05 0.03 |
| L1 | 9.6 0.2             | L3 | 0.5 0.1   |
| L2 | 8.4+0.5/-0.2<br>( ) |    |           |

5.2 /P



|   |                |
|---|----------------|
|   | M              |
| E | ( L94 -0 )     |
|   | ( L94 -0 )     |
|   | /C             |
|   | -P -A<br>-P -A |
| ④ | L P            |
| ⑤ | D C            |

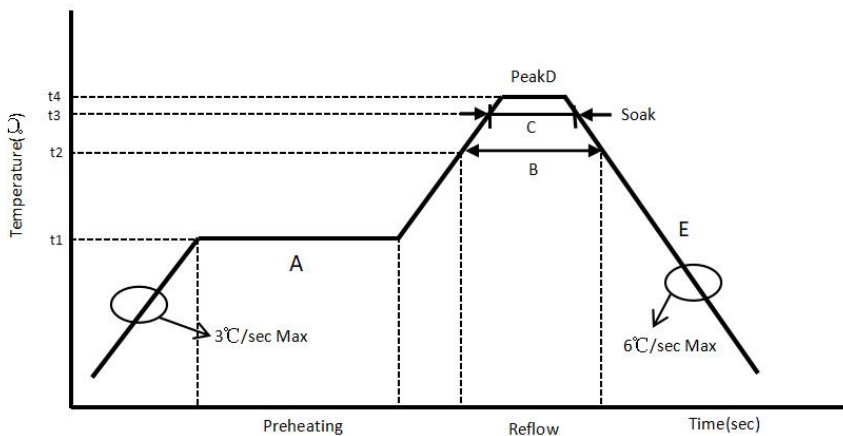
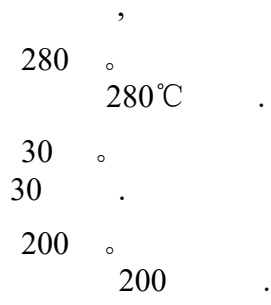
5.3 / P




|   |         |     |                 |
|---|---------|-----|-----------------|
| P | ( )     | ( ) | ( )             |
| D | 7.8 5.4 | 8.0 | 2.2 0.1 3.6 0.1 |

## 6. / Soldering condition

6.1 /



|   |        |   |        |         |
|---|--------|---|--------|---------|
| 1 | 175 25 | P | A<br>A | 120 60  |
| 2 | 215 10 |   | B      | 110 20% |
| 3 | 230 10 |   | C<br>C | 30 20%  |
| 4 | 275 5  | P | D<br>D | 20 10   |

|                                                                                                       |                                       |        |       |            |
|-------------------------------------------------------------------------------------------------------|---------------------------------------|--------|-------|------------|
|  <b>TRX</b><br>专注电容器廿年 | <b>SMD Y</b>                          |        |       |            |
|                                                                                                       | <b>SMD Y1 a.c. ceramic capacitors</b> |        |       |            |
|                                                                                                       | /Number                               | -3-079 | /Date | 2022-03-10 |
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6.2 /F

280 °  
280°C

30 °  
30

200 °  
200

P 180 °  
P 180

6.3 / I  
PCB/P B

PCB/P B,

400  
- 400

50  
50


5  
5

**7. / Performance and test methods**


| NO | I |             |  |
|----|---|-------------|--|
| 1  | A | N<br>L<br>L |  |
| 2  | D | 5.1<br>5.1  |  |






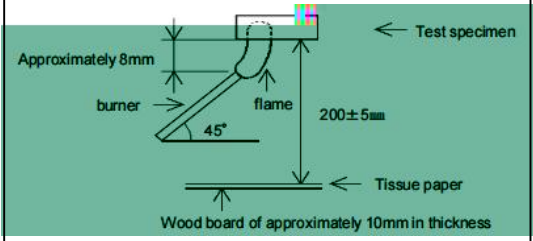
|                                                                                                       |                                       |        |       |            |
|-------------------------------------------------------------------------------------------------------|---------------------------------------|--------|-------|------------|
|  <b>TRX</b><br>专注电容器廿年 | <b>SMD Y</b>                          |        |       |            |
|                                                                                                       | <b>SMD Y1 a.c. ceramic capacitors</b> |        |       |            |
|                                                                                                       | /Number                               | -3-079 | /Date | 2022-03-10 |
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| NO | I |      |                                             |                                                                                                                                                         |
|----|---|------|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8  | C |      |                                             | 150 180 C<br>90 30<br>P 150 180 C<br>90 30 .<br>/ . : 230 C-260 C<br>/ : 60 15 .<br>/ : 4<br>15--35 45--75% H<br>24 2<br>L 15-35 , 45-75% H<br>24 2 , . |
|    |   |      | NO.3<br>P NO.3                              |                                                                                                                                                         |
|    |   |      | L: 5%<br>5P: 10%<br>5 : 20%<br>5 : 20%      |                                                                                                                                                         |
|    |   | D.F. | L: 1.0%<br>5P: 2.5%<br>5 : 2.5%<br>5 : 2.5% |                                                                                                                                                         |
|    |   | I .  | NO.7<br>P NO.7                              |                                                                                                                                                         |
| 9  |   |      |                                             | (JI K 8101)<br>(JI K 5902) ( )<br>25%) ( )<br>I (JI K 8101) (JI K<br>5902) (25% ( )<br>) . ( )<br>I 2 0.5 2 0.5 .<br>: 245 10 C                         |
| 10 | C | A    | N                                           |                                                                                                                                                         |
|    |   |      | NO.3<br>P NO.3                              | : +125 3<br>: -40 3                                                                                                                                     |
|    |   |      | L: 5%<br>5P: 10%<br>5 : 20%<br>5 : 20%      | / : 5                                                                                                                                                   |
|    |   | D.F. | L: 1.0%<br>5P: 2.5%<br>5 : 2.5%<br>5 : 2.5% | 30<br>25 3 24 2<br>C 25 3<br>24 2 .                                                                                                                     |
|    |   | I .  | NO.7<br>P NO.7                              |                                                                                                                                                         |

|                                                                                                       |                                       |        |       |            |
|-------------------------------------------------------------------------------------------------------|---------------------------------------|--------|-------|------------|
|  <b>TRX</b><br>专注电容器廿年 | <b>SMD Y</b>                          |        |       |            |
|                                                                                                       | <b>SMD Y1 a.c. ceramic capacitors</b> |        |       |            |
|                                                                                                       | /Number                               | -3-079 | /Date | 2022-03-10 |
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| NO | I               |     |                                                                                                       |                                                                |
|----|-----------------|-----|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| 11 |                 |     | C<br>L: 5%<br>5P: 10%<br>5 : 15%<br>5 : 15%<br>DF 2.5%                                                | F : 10 55 10H<br>/ :1.5<br>6<br>6<br>2<br>2                    |
| 12 | ( )<br>D<br>( ) |     | N                                                                                                     | / : 40 2                                                       |
|    |                 | C   | $\Delta=(C -C_0)/C_0$<br>L $\Delta$ : 5%<br>5P $\Delta$ : 10%<br>5 $\Delta$ : 15%<br>5 $\Delta$ : 15% | / : 95 3% H<br>/ : 21<br>: (400 )<br>: A (400 )                |
|    |                 |     | NO.3<br>P NO.3                                                                                        | 24 2<br>25 3                                                   |
|    |                 | I . | 3000M                                                                                                 | 24 2<br>25 3                                                   |
| 13 | E               |     | N                                                                                                     | 8K 3<br>8K<br>/ : 125 3                                        |
|    |                 | C   | $\Delta=(C -C_0)/C_0$<br>L $\Delta$ : 5%<br>5P $\Delta$ : 10%<br>5 $\Delta$ : 15%<br>5 $\Delta$ : 15% | /D : 1000+24 -0<br>: 680 AC 1.7<br>1000<br>0.1<br>: 680 AC 1.7 |
|    |                 |     | NO.3<br>P NO.3                                                                                        | 1000 . . . 0.1 .<br>47 5%                                      |
|    |                 | I . | 3000M                                                                                                 | E<br>47 5%.<br>25 3 24 2<br>C<br>24 2 25 3                     |

|                                                                                                       |                                       |        |         |            |
|-------------------------------------------------------------------------------------------------------|---------------------------------------|--------|---------|------------|
|  <b>TRX</b><br>专注电容器廿年 | <b>SMD Y</b>                          |        |         |            |
|                                                                                                       | <b>SMD Y1 a.c. ceramic capacitors</b> |        |         |            |
|                                                                                                       | /Number                               | -3-079 | /Date   | 2022-03-10 |
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| NO | I |                                                                                      |              |
|----|---|--------------------------------------------------------------------------------------|--------------|
| 14 | I | N                                                                                    |              |
|    |   | I                                                                                    | P : 8.0K     |
|    |   | 24 3                                                                                 | I : 10       |
|    |   | I 24 3                                                                               | I : 24       |
| 15 | P | 30                                                                                   | 30           |
|    |   | 30                                                                                   | E            |
|    |   | 30                                                                                   | : 30         |
|    |   | 30                                                                                   | /L : 12 1    |
|    |   | 30                                                                                   | 35           |
|    |   | 30                                                                                   | G : L 35     |
|    |   | 30                                                                                   | /I : 0.5 0.1 |
|    |   | 30                                                                                   | /O : 0.9     |
|    |   | 30                                                                                   | 95%          |
|    |   | 30                                                                                   | G : B 95%    |
|    |   |  |              |

|                                                                                                       |                                       |        |         |
|-------------------------------------------------------------------------------------------------------|---------------------------------------|--------|---------|
|  <b>TRX</b><br>专注电容器廿年 | <b>SMD Y</b>                          |        |         |
|                                                                                                       | <b>SMD Y1 a.c. ceramic capacitors</b> |        |         |
|                                                                                                       | /Number                               | -3-079 | /Date   |
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|    |   |  |
|----|---|--|
| NO | I |  |
|----|---|--|

|  |       |       |
|--|-------|-------|
|  | 30 5% | 70 5% |
|  | M     | 5     |

|    |   |   |   |           |
|----|---|---|---|-----------|
| 16 | C | N | . |           |
|    |   |   |   | NO.3 NO.7 |
|    |   | P |   | N .3 N .7 |

|                                                                                 |                                       |        |       |            |
|---------------------------------------------------------------------------------|---------------------------------------|--------|-------|------------|
|  | <b>SMD Y</b>                          |        |       |            |
|                                                                                 | <b>SMD Y1 a.c. ceramic capacitors</b> |        |       |            |
|                                                                                 | /Number                               | -3-079 | /Date | 2022-03-10 |
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**9. /Content of toxic and harmful substances control requirements**

H 2.0 2011/65/E

EACH N 190 7/2006



|                         | ( : ) |
|-------------------------|-------|
| /C                      | <100  |
| /L                      | <1000 |
| /M                      | <1000 |
| /H                      | <1000 |
| PBB /P                  | <1000 |
| PBDE /P                 | <1000 |
| + + + /C +P +H +C +6( ) | <100  |
| /C                      | <900  |
| /B                      | <900  |
| + /C +B                 | <1500 |
| EACH H C HC ( HC) EACH  | EACH  |

**10. /Storage conditions**

(1).

E ; , , ,  
 . A , , , , ,

(2).


/ : 10 30  
 /H : 60% .

(3).


168  
 - 168 HIC - . A

(4).

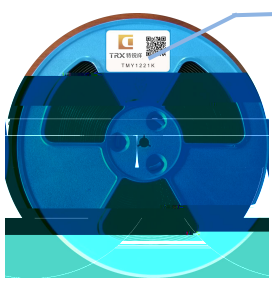



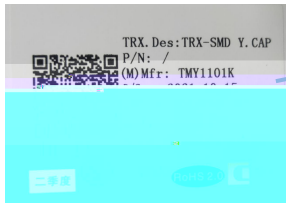
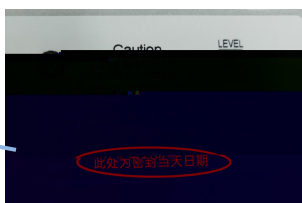
60 168  
 I 6 (60 168 ) HIC

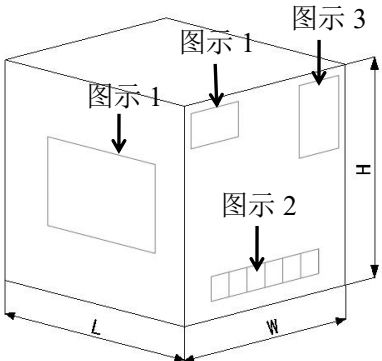


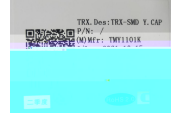
|                                                                                                       |                                       |        |         |            |  |
|-------------------------------------------------------------------------------------------------------|---------------------------------------|--------|---------|------------|--|
|  <b>TRX</b><br>专注电容器廿年 | <b>SMD Y</b>                          |        |         |            |  |
|                                                                                                       | <b>SMD Y1 a.c. ceramic capacitors</b> |        |         |            |  |
|                                                                                                       | /Number                               | -3-079 | /Date   | 2022-03-10 |  |
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11. /Prod

|                                                                                                       |                                       |        |         |
|-------------------------------------------------------------------------------------------------------|---------------------------------------|--------|---------|
|  <b>TRX</b><br>专注电容器廿年 | <b>SMD Y</b>                          |        |         |
|                                                                                                       | <b>SMD Y1 a.c. ceramic capacitors</b> |        |         |
|                                                                                                       | /Number                               | -3-079 | /Date   |
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11.4 /P P

|                                                                                                        |                                                                                                      |     |      |
|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-----|------|
| <b>/inner-packaging</b>                                                                                |                                                                                                      | /I  |      |
|  <p>标签/L</p>          |  <p>料号</p>         | .D  |      |
|  <p>3.0KPC / : 13</p> |                    | P/N |      |
|                      |  <p>此处为密封当天日期</p> | M   |      |
| /P                                                                                                     | /L                                                                                                   | /H  | D/C  |
|                                                                                                        |                                                                                                      |     | L .N |
|                                                                                                        |                                                                                                      |     | PEC  |

|                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>/Outer-packaging</b>                                                             |                                                                                     |                                                                                      |                                                                                       |
|  |  |  |  |
| 图示 1/F 1                                                                            | 图示 2/F 2                                                                            | 图示 3/F 3                                                                             |                                                                                       |
| D ( )                                                                               |                                                                                     | O B                                                                                  |                                                                                       |
| L                                                                                   | H                                                                                   | 42KPC                                                                                |                                                                                       |
| 355                                                                                 | 358                                                                                 | 18KG                                                                                 |                                                                                       |

|                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>/Package sketch:</b>                                                             |                                                                                     |                                                                                      |                                                                                       |
|  |  |  |  |
| /O B                                                                                | 14 / /14 /B                                                                         | ( / / )                                                                              | ( / / )                                                                               |
|                                                                                     |                                                                                     | P (L/ /H)                                                                            | (L/ /H)                                                                               |
|                                                                                     |                                                                                     | 1100*1100*90                                                                         | 1100*1100*1600                                                                        |
| 1.                                                                                  | 5                                                                                   | 5                                                                                    | 2. PALLE & APPING                                                                     |
| 3. 50                                                                               | 4. /                                                                                | 5                                                                                    | ; 2. P & -                                                                            |
| Remark:1.                                                                           | 5                                                                                   | ; 3.50                                                                               | ; 4. N                                                                                |



|                                                                                 |                                       |        |       |            |
|---------------------------------------------------------------------------------|---------------------------------------|--------|-------|------------|
|  | <b>SMD Y</b>                          |        |       |            |
|                                                                                 | <b>SMD Y1 a.c. ceramic capacitors</b> |        |       |            |
|                                                                                 | /Number                               | -3-079 | /Date | 2022-03-10 |
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**12. /Application notes**

①.

A

②.

PCB

PCB

PCB

C

(PCB)

PCB

PCB

③.

A

④.

P

⑤.

D

PCB

⑥.

D

PCB

PC