

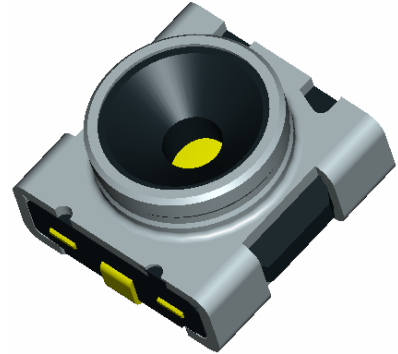
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|------------------------|-----------------------|--------------------|------------------|----------------|
| Product specifications | DOC. No.: 651-0163-01 | | Rev.: C | Page: 1/6 |
| | P/N: | Approved/Date | Approved/Date | Initiated/Date |
| KH-252515-Y2.1 | Henry 06/01/18' | Henry 06/01/18' | SAM 06/01/18' | |

1、Scope

This product is applied to RF circuits and provides a switch interface for circuit tests . And it' s the second type of the “MINI RF CONNECTOR”, with excellent performance and less space occupation.

2、Technology Parameters

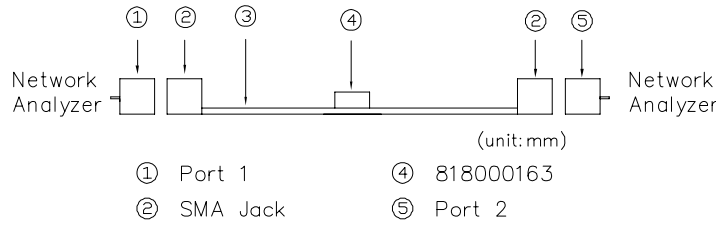
- 2.1 Voltage Rating 250VAC
- 2.2 Current Rating 1A
- 2.3 Frequency Range DC~6GHz
- 2.4 Impedance 50Ω
- 2.5 Operating Temperature -40℃ ~+85℃



3、Electrical Characteristics

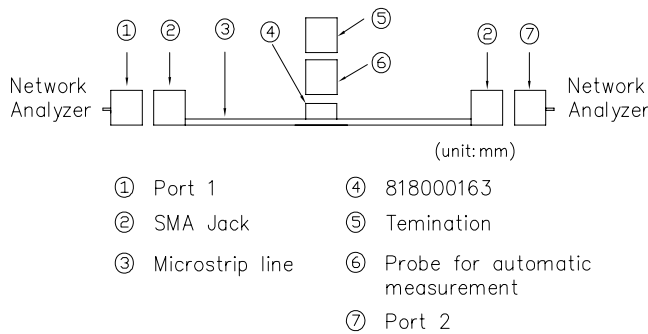
- 3.1 Insulation Resistance 500MΩ
- 3.2 Dielectric Withstanding Voltage 300V AC
- 3.3 Contact Resistance 120 mΩ max
- 3.4 Voltage Standing wave Ratio(VSWR) 1.2 max (DC~3GHz) , 1.3 max (3~6GHz)

3.4.1 Test Method:



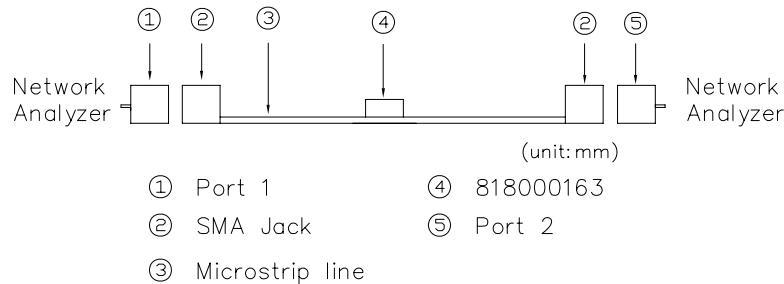
3.5 Isolation 20dBmin (DC~3GHz) , 15dBmin (3~6GHz)

3.5.1 Test Method:



3.6 Insertion Loss 0. 10dBmax (DC~3GHz) , 0. 20dBmax (3~6GHz)

3.6.1 Test Method:

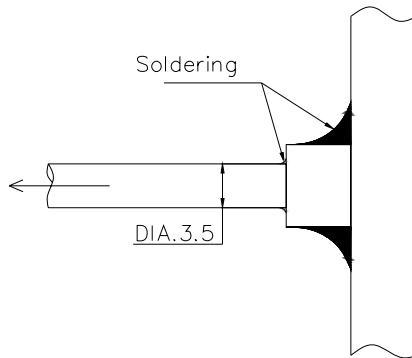


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4 · Mechanical Characteristics

- 4.1 Contact Retention Force 3.4N~4.5N
- 4.2 Mating Force 30N or less
- 4.3 Unmating Force 5N~40N
- 4.4 Mechanical Durability 500 Cycles
- 4.5 Adhered Force of Solder 50N

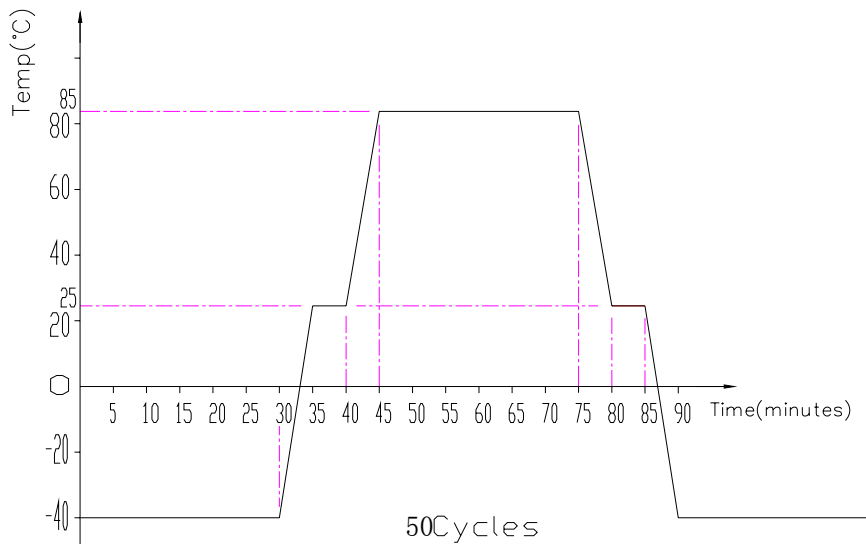
4.5.1 Test method:



- 4.6 Shock Acceleration: 750m/s² (peak-to-peak). Period: 6m sec. Waveform: Half-sine.
- 4.7 Vibration Frequency Range:10Hz~30Hz Amplitude: 3mm.

5 · Environmental Characteristics

5.1 High Temperature Cycling

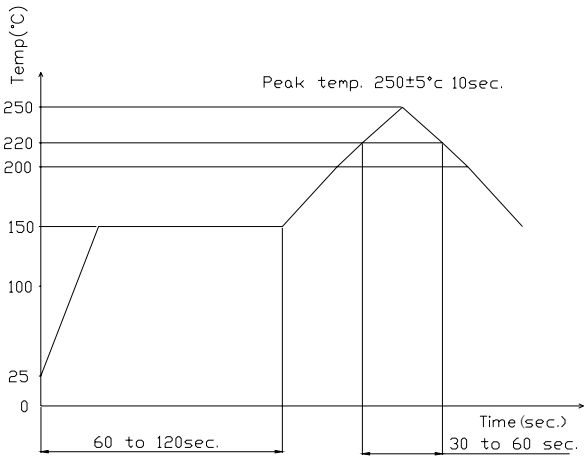


- 5.2 Humidity, Steady State: Temperature: 60°C Humidity: 95% RH Period: 96 hours
- 5.3 Salt Spray Temperature: 35°C Solution Conduction: 5% , Period: 48 hours

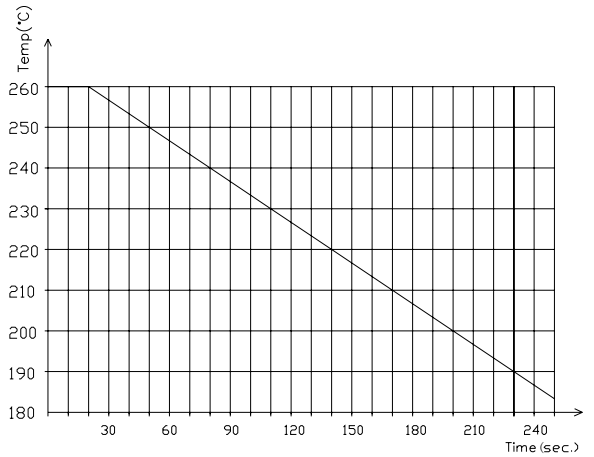
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6、SMT Soldering Condition

6.1 Recommended IR Temperature & Time Curve



6.2 IR Extreme Temperature & Time Curve

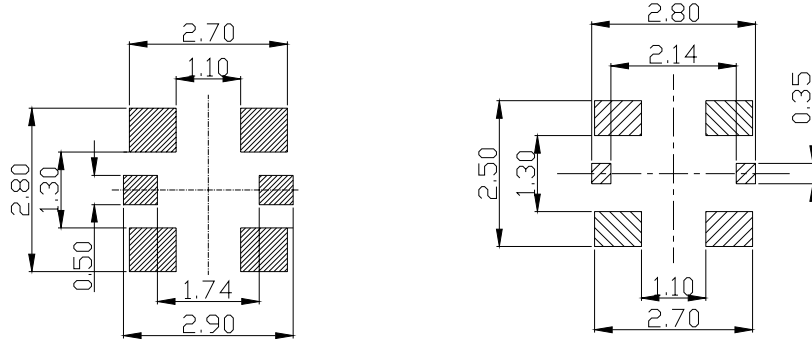


7、Profile Dimensions

| | | | | |
|-----|--------------------|---------------------|-----------------|------|
| 4 | Case | Engineering plastic | None | 1 |
| 3 | Outer terminal | Copper Alloy | Ag 40u"/Ni 50u" | 1 |
| 2 | Output terminal(R) | Copper Alloy | Au 5u"/Ni 50u" | 1 |
| 1 | Input terminal(C) | Stainless Steel | Au 5u"/Ni 50u" | 1 |
| No. | Part Name | Material | Finish | Q'ty |

| | | | |
|------------------------|------------------------|-------------------------------------|-------------------------------------|
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8、Printed Circuit Board (PCB) Pad



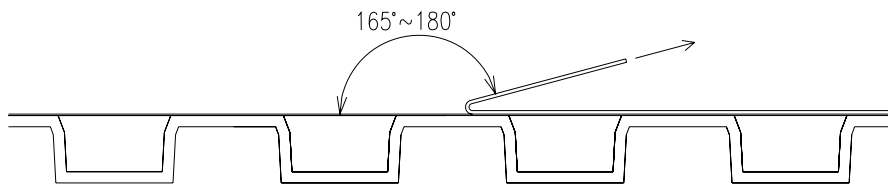
Recommend PCB Layout
General Tolerance: $\pm 0.05\text{mm}$

The standard solder stencil mask pattern
(Mask thickness 0.12mm)

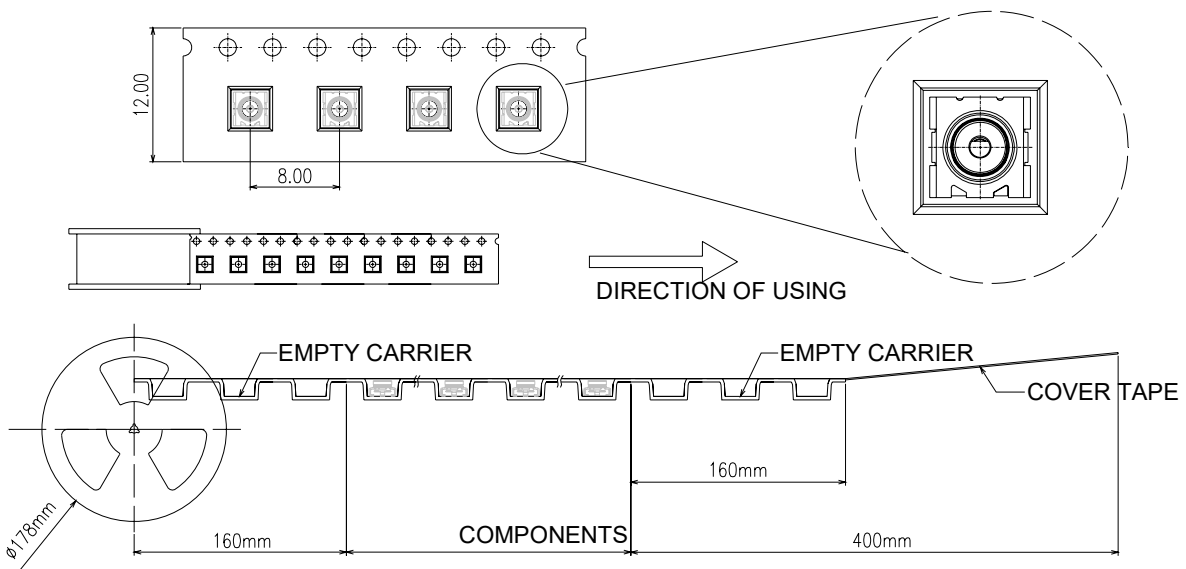
9、Package Specification

9.1 Peeling off Force of Cover Tape

When cover tape is peeled off as in right figure by a speed of 300mm/minute. The peeling off force should be 1.3N maximum.



9.2 THE WAY OF PACKAGE : TAPE PACKING, 1000Pcs/REEL ($\Phi 178\text{mm}$)



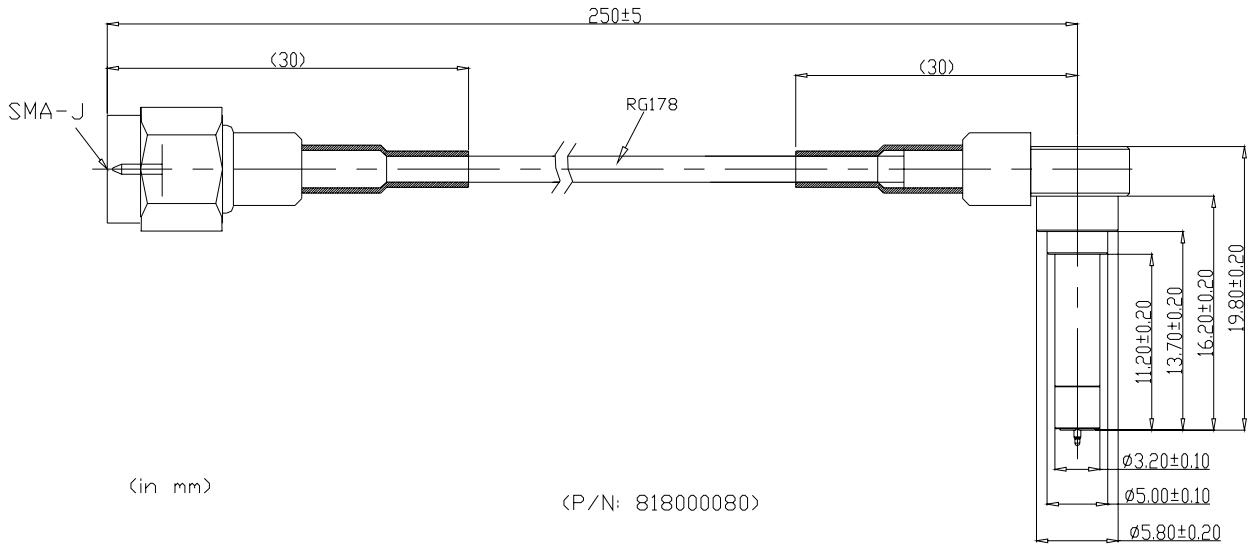
10、Storage Conditions

Temperature: $-10\sim+40\text{ }^{\circ}\text{C}$
Relative Humidity: 15~85 % RH
Life: Half year.

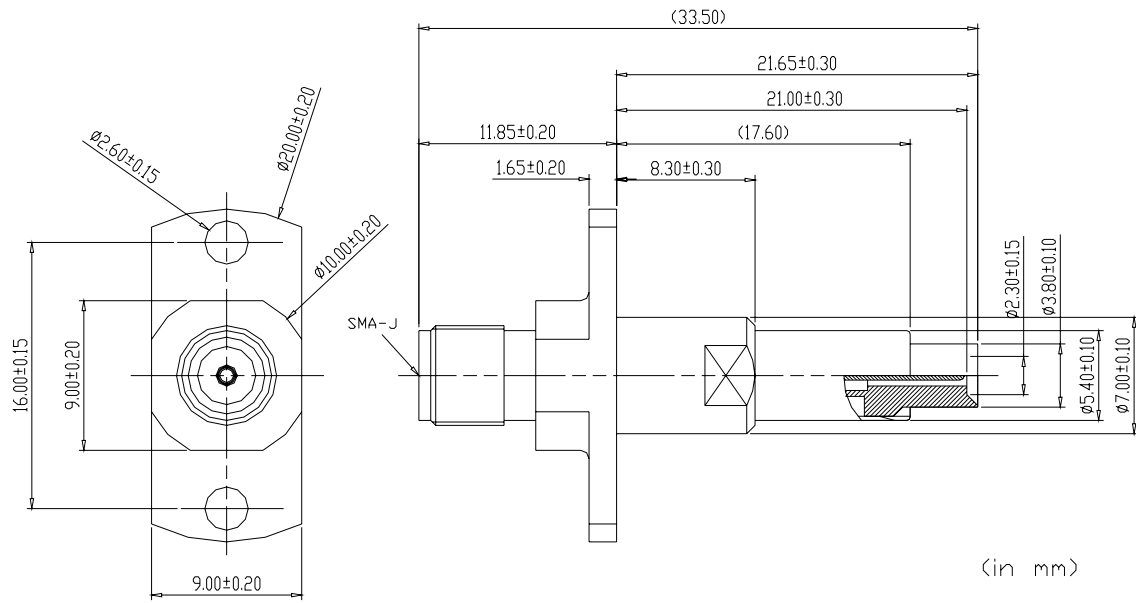
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| | P/N: KH-252515-Y2.1 | Approved/Date Henry 06/01/18' | Approved/Date Henry 06/01/18' |

11 · Accessories for Tests

Type I :



Type II :



| | | | | | | | | | | |
|------------------------------|------------------------|--|-----------------------|--|--------------------|---------|------------------|-----------|--|--|
| Kinghelm [®] | Product specifications | | DOC. No.: 651-0163-01 | | | Rev.: C | | Page: 6/6 | | |
| | P/N: | | Approved/Date | | Approved/Date | | Initiated/Date | | | |
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12、Test Plan

| ITEMS | | Test Group | | | | | | | | | |
|--------------------------------------|--------------------------|------------|------|------|------|---|---|---|---|---|---|
| Test NO. | Test Items | A | B | C | D | E | F | G | H | I | J |
| 3.1 | Insulation Resistance | 1 | | 1, 5 | | | | | | | |
| 3.2 | Withstanding Voltage | 2 | | 2, 6 | | | | | | | |
| 3.3 | Contact Resistance | 3, 12 | 1, 4 | | 1, 3 | | | | | | |
| 3.4 | VSWR | 4, 13 | | | | | | | | | |
| 3.5 | Insulation | 5, 14 | | | | | | | | | |
| 3.6 | Insertion Loss | 6, 15 | | | | | | | | | |
| 4.2 | Insertion Force | 7, 10 | | | | | | | | | |
| 4.3 | Unmating Force | 8, 11 | | | | | | | | | |
| 4.4 | Mechanical Durability | 9 | | | | | | | | | |
| 4.5 | Adhered Force of Solder | | | | | 1 | | | | | |
| 4.6 | Shock | | 2 | | | | | | | | |
| 4.7 | Vibration | | 3 | | | | | | | | |
| 5.1 | High Temperature Cycling | | | 3 | | | | | | | |
| 5.2 | Humidity | | | 4 | | | | | | | |
| 5.3 | Salt Spray | | | | 2 | | | | | | |
| The least quantity of the Specimens. | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | |