

Microwave Coaxial Connectors



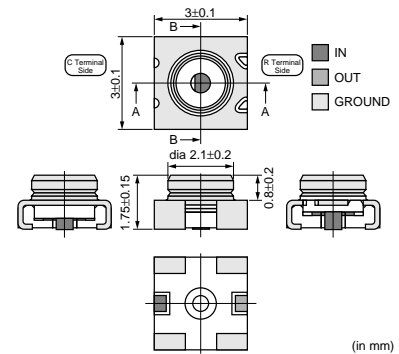
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Microwave Coaxial Connectors with Switch SWD Type

■ Features

1. The coaxial connector with switch is very useful for characteristic measurement of hand held phone and microwave circuit.
2. It is possible to switch the line connection and disconnection easily by special probe.
3. Small size, low profile. Size 3x3x1.75mm (LxWxH).
4. Excellent characteristic. Low IL 0.2dB max..
V.S.W.R. 1.3 max. Isolation 15dB min. (at DC to 6GHz).
5. Surface mountable and reflow solderable.
6. Tape package available.

MM8430-2600B



■ Applications

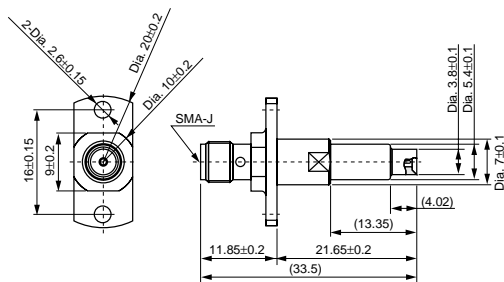
Cellular phone, W-LAN, Other wireless and measurement equipment.

| Part Number | Rated Voltage (Vrms) | Contact Resistance (ohm) | Withstand Voltage (Vrms) | Insulation Resistance (M ohm) | Durability (cycles) | Frequency Rating | Temperature Range (degree C) | VSWR | Insertion Loss (On) (dB) | Isolation (Off) (dB) | Inner Electrode (C) | Inner Electrode (R) (material) | Outer Electrode (material) |
|---------------------|----------------------|--------------------------|--------------------------|-------------------------------|---------------------|------------------|------------------------------|----------|--------------------------|----------------------|-----------------------------|--------------------------------|----------------------------|
| MM8430-2600B | 250 | 0.05 max. | 300 (AC) | 500 | 500 | DC to 6GHz | -40 to +90 | 1.2 max. | 0.1 max. (DC to 3GHz) | 20 min. (DC to 3GHz) | Stainless Steel Gold plated | Copper Alloy Gold Plated | Copper Alloy Silver plated |

Impedance : 50 ohm

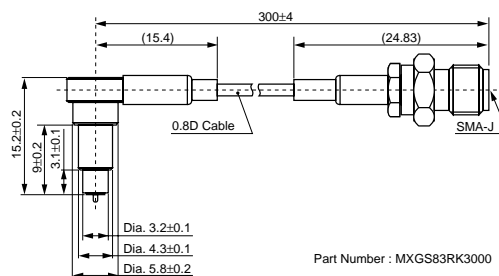
■ Measurement Probe Dimensions

MM126036



(in mm)

MXGS83RK3000



Part Number : MXGS83RK3000

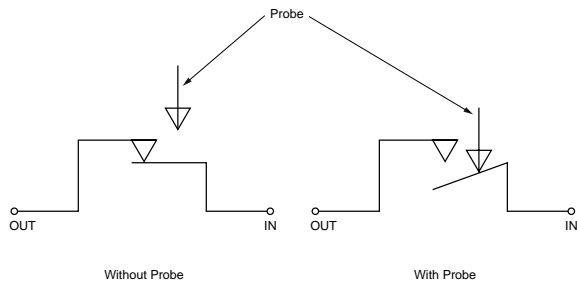
(in mm)

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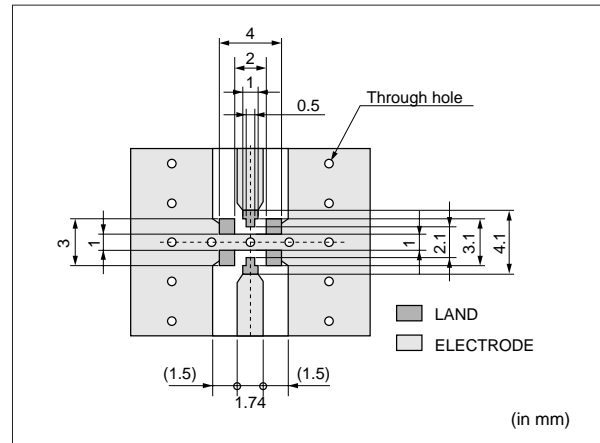
■ Structure



■ Standard Land Dimensions

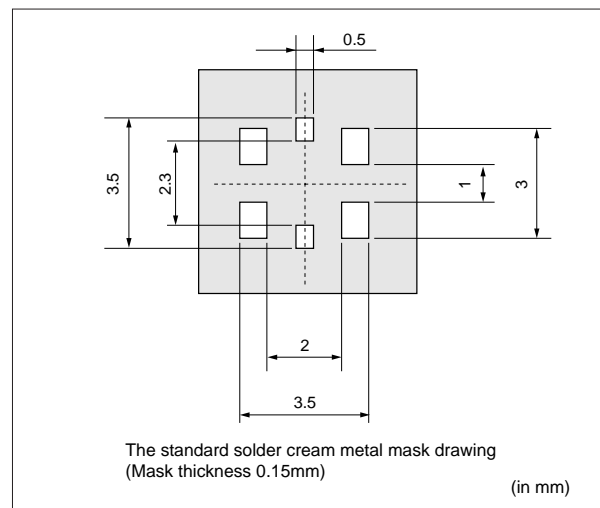
1. Standard pattern dimensions

- Please design I/O pattern so that the impedance match 50 ohm including the land pattern.
- The material of PCB is the epoxy resin of grass fabric base. ($\epsilon r=4.8$). Thickness is 1.0mm.
- The solder resist should be printed except for the land pattern on the PCB.



2. Standard metal mask pattern

There is possibility to have the contact failure by solder shifting into contact point, if the excess solder is used by non standard metal mask pattern.



■ Notice (Storage and Operating Condition)

1. Environment Conditions

- (1) This product is designed for use of electrical equipment in the environment (temperature, humidity, atmospheric pressure and etc.) specified in this approval drawing: it may not be used in the following environments or under the following conditions :
 - (a) Ambient air containing corrosive gas (Chlorine gas, Hydrogen sulfide gas, Ammonia gas, Sulfuric acid gas, Nitric oxide gas, etc.)
 - (b) Ambient air containing volatile or combustible gas.
 - (c) In liquid (water, oil, chemical solution, organic solvents, etc.)
 - (d) In environments with a high concentration of

airborne particles.

- (e) In direct sunlight
- (f) Other environments similar to the above conditions.

- (2) Contact the manufacturer before using the product in any of the above environments or under any of the above conditions.

2. Storage

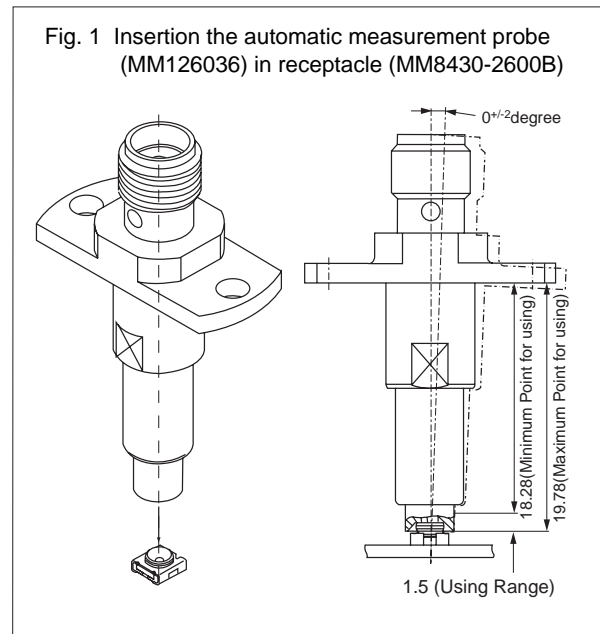
Store in manufacturer's package or tightly re-closed box with the following conditions. Use this product within 6 months after receipt. Check the terminal solderability before use, if the product has been stored for more than 6 months.

Temperature : -10 to +40 degree C

Humidity : 15 to 85 % RH

■ Notice (Handling)

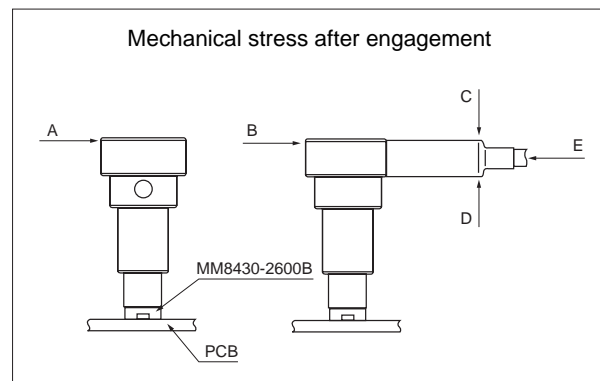
1. Automatic measurement probe (MM126036)
 - Automatic measurement probe (MM126036) should be used on the condition in Fig. 1 for good connection without any damages.
 - The engagement strokes from the flange to the tip of probe is 18.28mm to 19.78mm with vertical (0 ± 2 degree) direction.



2. L type probe with lock function (MXGS83RK3000)
 - Do not try to pull the cable, when a connector with a coaxial cable is handled.
 - Do not give a twisted torque to the cable and connector.
 - Mechanical stress:

The stress to the connector should be limited as figure shown right.

- (1) Stress to the housing.
Stress A and B: 0.7N Max.
- (2) Stress to the outer sleeve.
Stress C: 0.6N Max.
Stress D: 0.6N Max.
- (3) Cable pull strength.
Stress E: 0.7N Max.



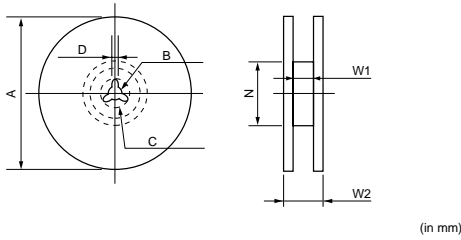
3. Usage Condition
 - (1) Do not apply electrical voltage greater than specified in the catalog. It might cause degradation or destruction of the product. Even if it endures during a short time, long time qualification is not guaranteed.
 - (2) Confirm that product performance is not influenced with any other components or materials which directly contact products.

4. Handling

Do not apply excessive shock or load to subassembly products such as soldered printed circuit board in case handling or transporting.

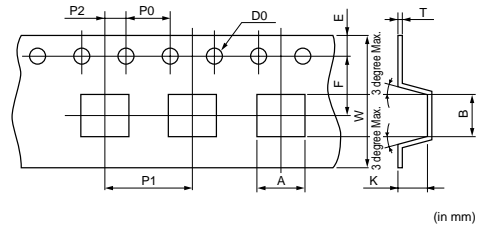
Package

■ Dimensions of Reel



| Murata Part Number | A | B | C | D | N (min.) | W1 | W2 (max.) |
|--------------------|------|------|------|------|----------|------|-----------|
| MM8430-2600RA1 | 178 | 13 | 21 | 2 | Dia. 50 | 13.5 | 18.5 |
| MM8430-2600RB3 | 330 | 13 | 21 | 2 | Dia. 50 | 13.5 | 18.5 |
| TOLERANCE | ±2.0 | ±0.5 | ±0.8 | ±0.5 | - | ±1.5 | - |

■ Dimensions of Taping



| A | B | W | D0 | E | F | K |
|---------|---------|--------|-------------|----------|---------|----------|
| 3.4±0.1 | 3.4±0.1 | 12±0.2 | Dia.1.5±0.1 | 1.75±0.1 | 5.5±0.1 | 2.0±0.15 |

| P0 | P1 | P2 | T |
|-------|-------|-------|----------|
| 4±0.1 | 8±0.1 | 2±0.1 | 0.3±0.05 |

■ Minimum Quantity

- MM8430-2600RA1: 180 mm dia. reel/1000 pcs.
- MM8430-2600RB3: 330 mm dia. reel/3000 pcs.
- MM8430-2600B : Bulk/free