

# SMA Type Switch Data Sheet

## ■ Part No. : RSJS-S00-000-000

GigaLane's **SMA Type Switch (RSJS)** is designed for application in home repeater and can be widely used in communication system such as Ubicell, Femtocell and etc.

The RSJS is for switching signal automatically as the mating connector is plugged in.



### **[Features]**

- SMA Type
- DC ~ 2.3 GHz
- Min. 500 mating cycles

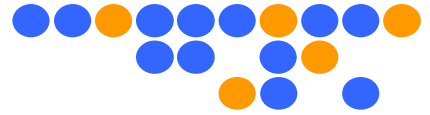
### **[Applications]**

- Home Repeater
- Telecom Base Station
- Switching between internal and external antenna

## Technical Data

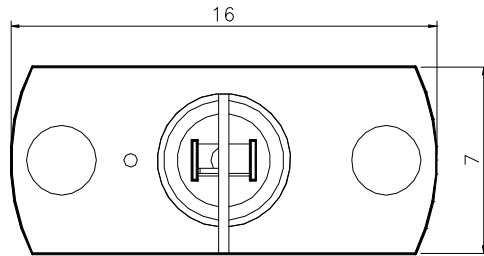
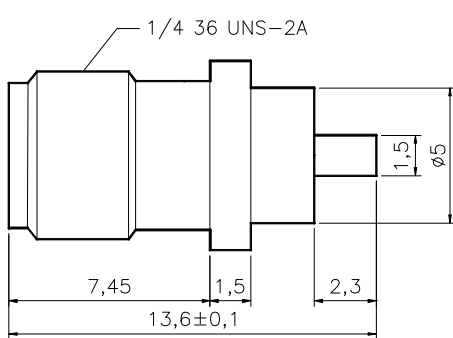
<b>Electrical Data</b>	<b>Impedance</b>	50 $\Omega$ nominal
	<b>Frequency Range</b>	DC ~ 2.3 GHz
	<b>Return Loss</b>	N.O. : 20 dB Min N.C. : 17 dB Min
	<b>Isolation</b>	20 dB Min
	<b>Contact Resistance (max)</b>	Inner : 10 m $\Omega$ , Outer : 2 m $\Omega$
	<b>Power Rating</b>	1 Watt
	<b>Insulation Resistance (min)</b>	500 M $\Omega$
<b>Mechanical Data</b>	<b>Durability</b>	500 mating cycles
	<b>Contact Captivation (axial)</b>	1.0 kg min
<b>Environmental Data</b>	<b>Operating Temp</b>	- 55 $^{\circ}$ C ~ 125 $^{\circ}$ C
	<b>Vibration</b>	MIL-STD-202
	<b>Thermal Shock</b>	MIL-STD-202
	<b>RoHS</b>	Compliant

<b>Material Data</b>	<b>Description</b>		<b>Material</b>	<b>Surface Plating</b>
	Inner Contact	Antenna Contact		Brass
OperationContact			BeCu	Gold
Outer Contact & Ground Pin			Brass	Gold
Insulator			PA6T66	



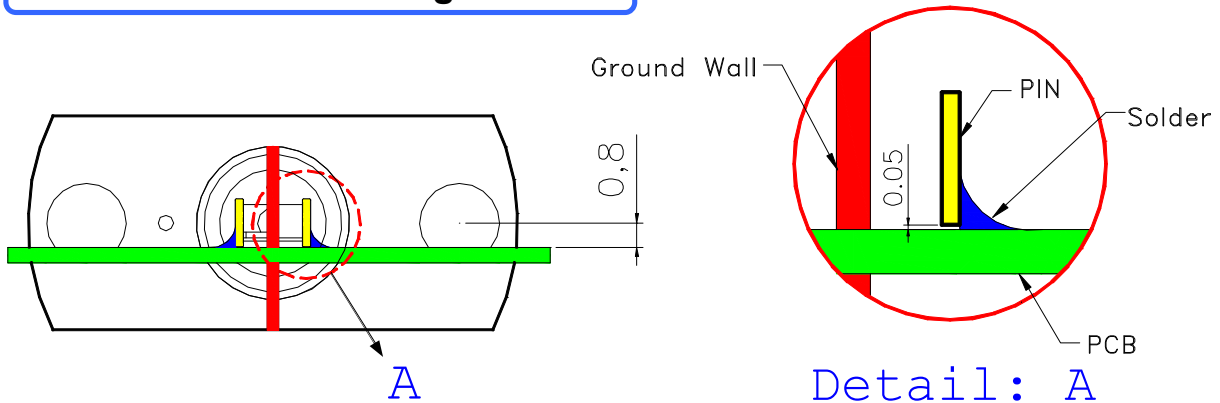
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## Outline Drawing



Unit : mm

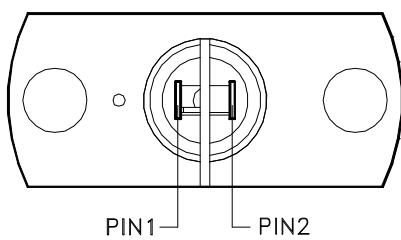
## Installation & Soldering method



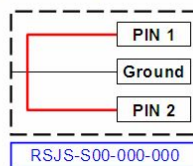
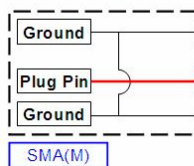
### Note

- 1) Recommended to leave 0.05mm gap between switching pins and PCB board to protect switching pins when installing on the module.
- 2) Solder outside of switching pins only for improving isolation performance (refer to Detail A)

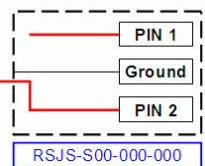
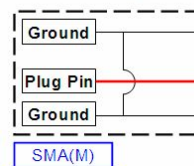
## Switching Mechanism

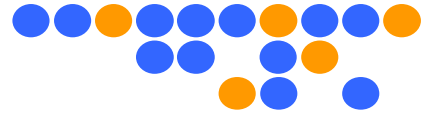


[Normally Contact]



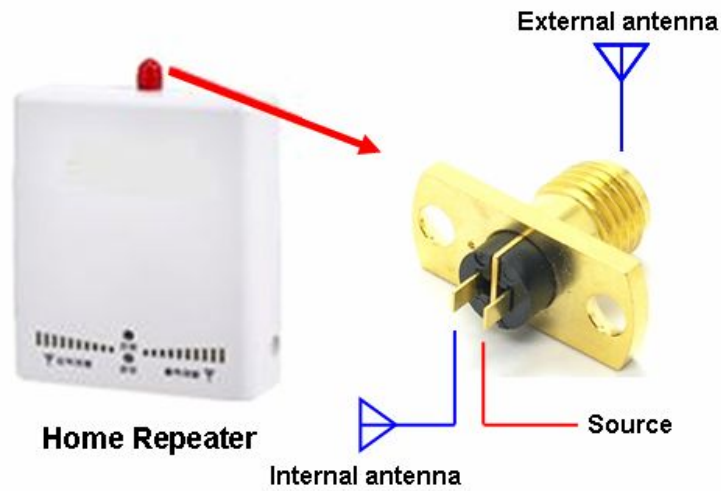
[Normally Open]





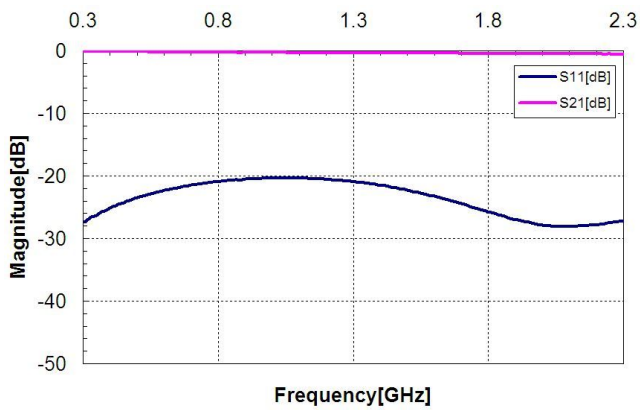
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## Application

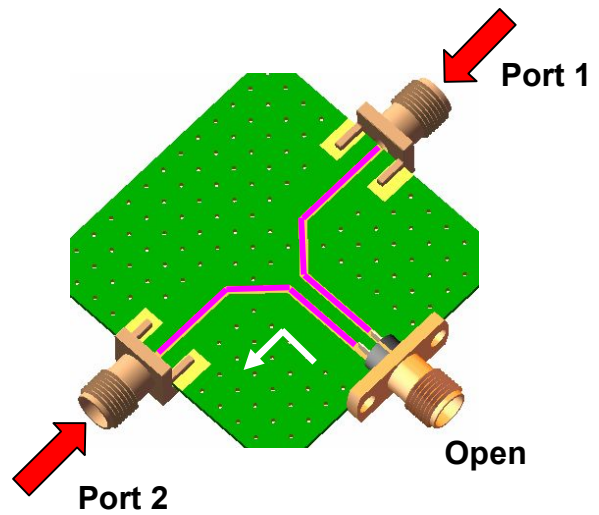


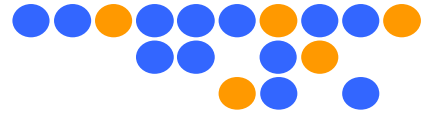
## Performance (Normally Contact)

### 1. RF TEST (N.C)



Frequency	2.3 GHz
Return loss	-26 dB
Insertion loss	-0.54 dB

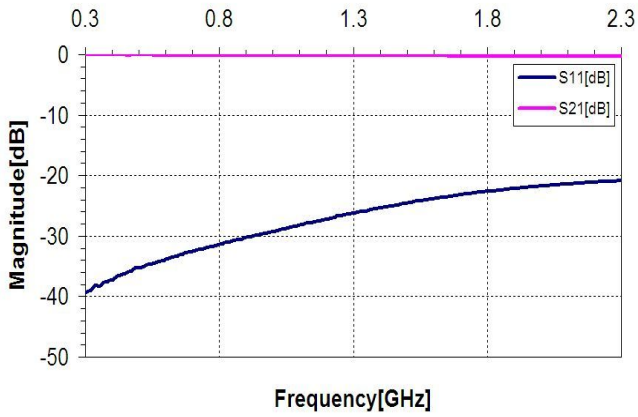




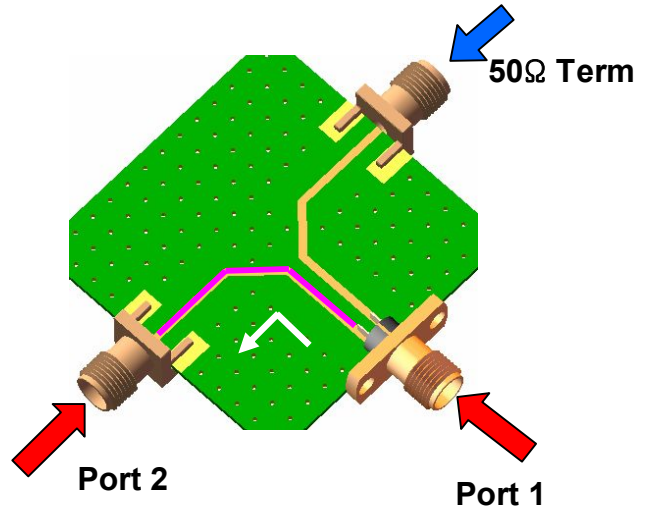
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## Performance (Normally Open)

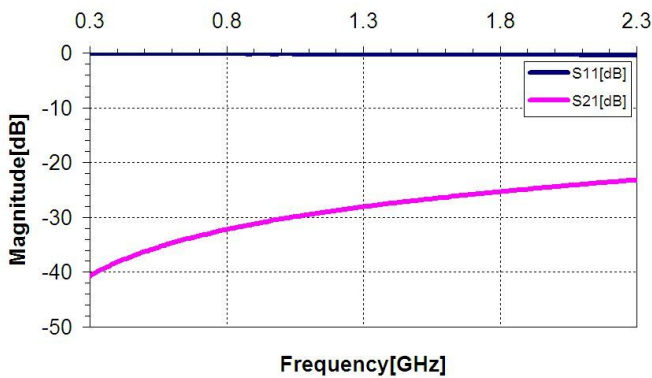
### 1. RF TEST (N.O)



Frequency	2.3 GHz
Return loss	-21.4 dB
Insertion loss	-0.3 dB



### 2. RF TEST ( ISOLATION)



Frequency	2.3 GHz
Return loss	-22.0 dB

