

### Features

Frequency range: 4 to 12GHz  
 Current or TTL logic compatible  
 Low VSWR and Insertion loss  
 High Isolation  
 Low DC power consumption  
 Positive & Negative DC Supply

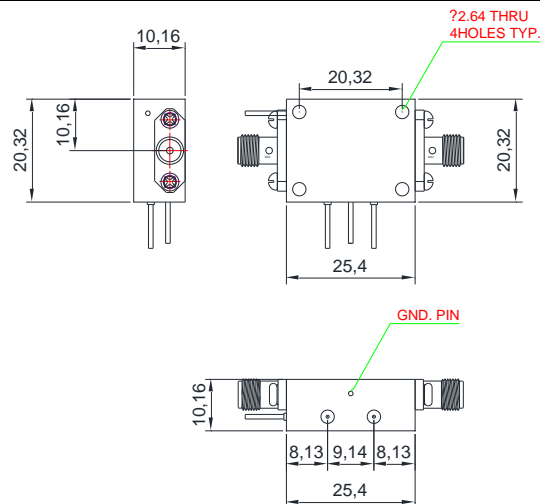
### Truth Table

Non-Inverting	
Control Input	Signal Path
E1	J1- J2
V <sub>LOW</sub>	Insertion loss
V <sub>HIGH</sub> *	Isolation

\* V<sub>HIGH</sub> = 2 V to 5 V.

### RF Electrical Specifications

Parameter	Specifications	Remarks
Frequency Range	4 ~ 12 GHz	
Max. Insertion Loss	2.2 dB	
Max. VSWR	1.7 : 1	
Min. Isolation	80 dB	
Switching Time	Rise/ Fall Time : 10 ns Max.	
	ON/OFF Time : 35 ns Max.	
Control Logic	Logic "0" (-0.3 to +0.8 V) for Port ON	
	Logic "1" (+2.0 to +5.0 V) for Port OFF	
DC Bias Voltage	+5 V±5%(35mA)	
	-12 to -15 V(60mA)	
In/ Out Impedance	50 Ω	
Operating Temperature	-55 ~ +115 °C	
Dimensions(W*H*D)	25.4 * 20.3 * 10.1 mm	Excluding Connectors



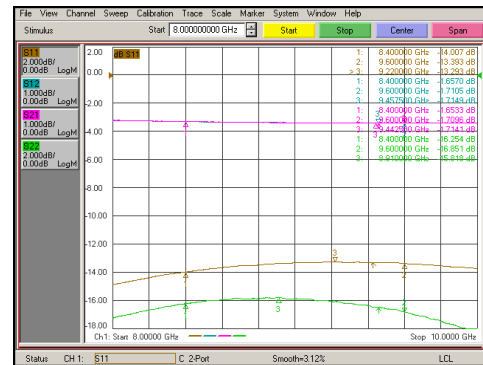
[Unit: mm]

## Test Data

### 1. J1-J2\_1GHz ~ 12GHz\_Insertion Loss & Return Loss\_ 25°C



<Frequency Range : 0.1G~13.5GHz>



<Frequency Range : 8G~10GHz>

Frequency	Spec	Insertion Loss[dB]	Remark
1-8 GHz	2.0 dB Max.	1.60	
8.4-9.6 GHz	2.0 dB Max.	1.71	
8-12 GHz	2.0 dB Max.	1.87	

Frequency	Spec	Return Loss	Remark
1-8 GHz	1.7 Max.(11.3 dB)	14.99	
8.4-9.6 GHz		13.36	
8-12 GHz		13.36	

Frequency	Spec	Insertion Loss[dB]	Remark
8 GHz	2.0 dB Max.	1.65	
10 GHz	2.0 dB Max.	1.71	
8-10 GHz	2.0 dB Max.	1.71	

Frequency	Spec	Return Loss	Remark
8 GHz	1.7 Max.(11.3 dB)	14.01	
10 GHz		13.39	
8-10 GHz		13.29	

## 2. J1-J2\_1GHz ~ 12GHz\_Isolation\_ 25°C



<Frequency Range : 0.1G~13.5GHz>



<Frequency Range : 8G~10GHz>

Frequency	Spec	Isolation [dB]	Remark
1-8 GHz	70 dB Min	80.96	
8.4-9.6 GHz		79.14	
8-12 GHz		75.78	

Frequency	Spec	Isolation [dB]	Remark
8 GHz	70 dB Min	80.39	
10 GHz		78.94	
8-10 GHz		78.90	

3. J1-J2\_Switching time\_ 25°C

