

**WithWave's Directional Coupler** offer frequency range from 12 GHz to 18 GHz and low insertion loss & VSWR. This Coupler (BC120180-10-SF) have 10 dB coupling & 12 dB directivity characteristics.

### ■ Features

- Nominal Coupling :  $10 \pm 1.0$  dB
- Directivity : 12 dB (Min.)
- SMA Connector (Female)



### ■ Specification

Scope	Specification	BC120180-10-SF
Electrical	Impedance	50 Ohm
	Freq. range	12 to 18.0 GHz
	Nominal Coupling	$10 \pm 1.0$ dB
	Insertion Loss	1.2 dB
	VSWR Primary	1.30: 1 (Typ.) 1.50: 1 (Max.)
	VSWR Secondary	1.40: 1 (Typ.) 1.50: 1 (Max.)
	Directivity	15 dB (Typ.) 12 dB (Min.)
	Average Power	30 W
	Peak Power	2 KW
Mechanical & Environmental	Input / Output Connector	SMA (Female)
	Weight	30 g
	Material	Aluminum
	Finishing	Black paint
	Operating Temperature Range	-40°C to +85°C

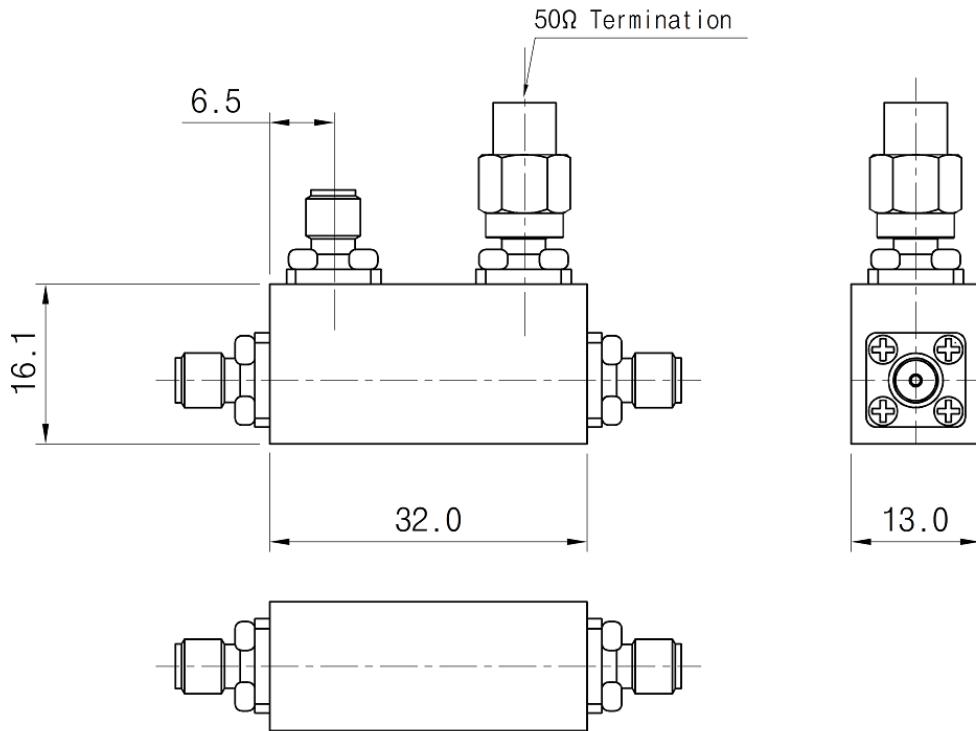
# Directional Coupler

12 to 18 GHz  
10 dB Coupling

**withwave**  
Next Generation Connectivity

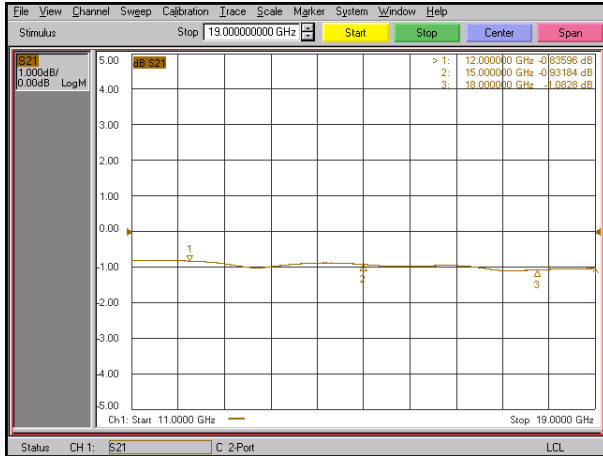
## ■ Drawing

Unit : mm  
Outline Tolerances  $\pm 0.5$   
Mounting Holes Tolerances  $\pm 0.2$

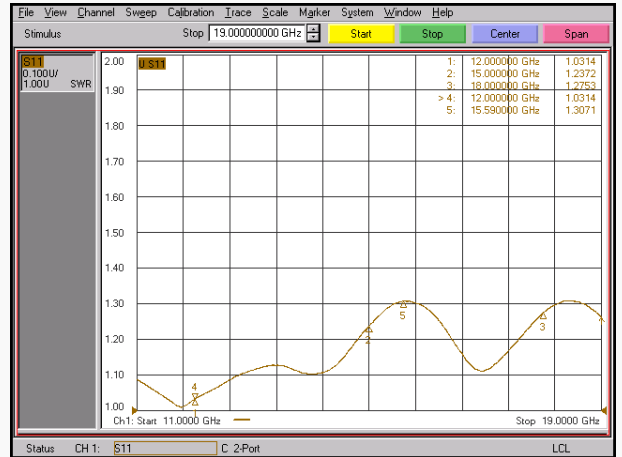


### Measurement

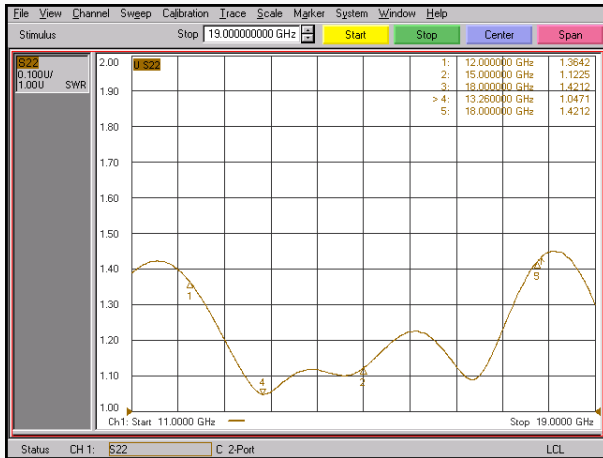
#### Insertion Loss (S21)



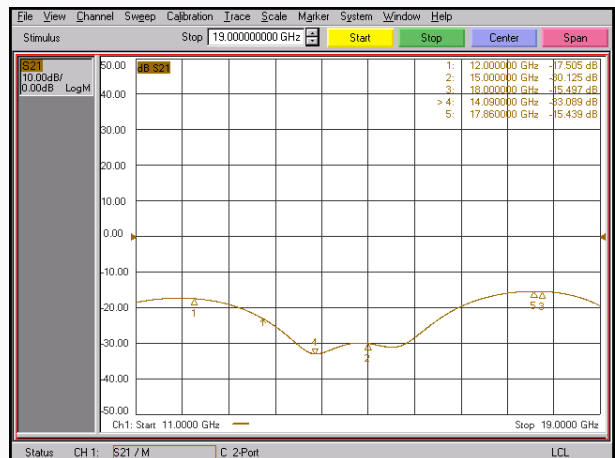
#### Primary VSWR



#### Secondary VSWR



#### Directivity



#### Nominal Coupling

