

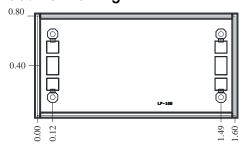
**Electrical Specifications (TA=+25°C)** 

Parameter	Min.	Тур.	Max.	Unit
Cut-off Freq. (f₀)	-	20	-	GHz
Pass band	20	-	40	GHz
Insertion Loss @ f₀	=	-	1.5	dB
Return Loss	15	-	=	dB
Out of band	≥20@1	≥20@15GHz		
Attenuation	≥40@13.2GHz			dB

Max. Input Power: 30dBm

Operating Temperature:  $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$ Storage Temperature:  $-65^{\circ}\text{C} \sim +150^{\circ}\text{C}$ 

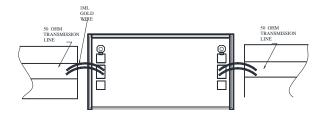
# **Outline Drawing**



#### Notes:

- 1. Dimensions are in millimeters. Tolerance: ±0.05 mm
- 2. Die thickness is 0.1 mm
- 3. Typical bond pad size is 0.1 x 0.1 mm

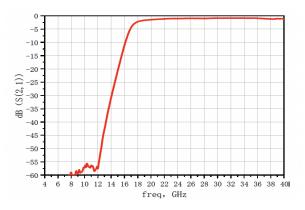
## **Recommended Assembly Diagram**



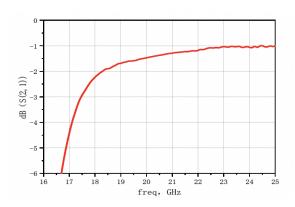
### Notes:

- 1. Die is back-metallized and can be mounted with AuSn eutectic preform or with electrically conductive epoxy.
- 2. We recommend using  $\Phi$  25um Au wire for wire-bonding, with max wire length of 400um.
- 3. Sinter using AuSn (80/20) alloy, ensuring the temperature does not exceed 300  $^{\circ}\text{C}$  for a maximum of 30 seconds.

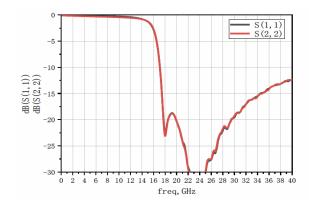
#### Typical Wideband Insertion Loss at T<sub>A</sub>=25



#### Typical Insertion Loss at T<sub>A</sub>=25



Typical Return Loss at T<sub>A</sub>=25



- 4. Handle die in clean environment. Do not attempt to clean the chip using liquid cleaning systems.
- 5. Die is ESD sensitive. ESD protection is required during usage and storage.