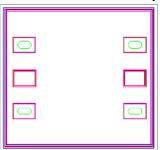
## AMT1618 / AMT1619 / AMT1620 / AMT1621 0.5dB / 1dB / 2dB / 4dB Fixed Attenuator Chip



### **Key Features:**

Frequency range: 0 – 40GHz

Insertion loss: 0.5dB / 1dB / 2dB / 4dB
Input/output standing wave: 1.2

• Chip dimensions: 0.7mm x 0.65mm x 0.1mm

• Applications: wireless communication, transceiver module, radio telecommunication etc.

#### **Description:**

This series is a high performance fixed attenuator chip, it is designed by Gallium Arsenide (GaAs) pHEMT process. It covers frequency range of DC – 40GHz, attenuation are 0.5dB, 1dB, 2dB and 4dB. This chip is designed with ground through metal vias on the back technology. All chip products p are 100% RF tested.

#### Absolute Maximum Ratings (Ta = 25°C)

Symbol	Parameter	Value	Remark
Pin	Input Power	30dBm	
Tm	Sintering Temperature	290°c	30s, N <sub>2</sub> protection
Tstg	Storage Temperature	-65 ~ +150°C	

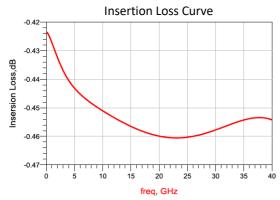
<sup>[1]</sup> Operation outside any of the Absolute Maximum Ratings may cause permanent device damage.

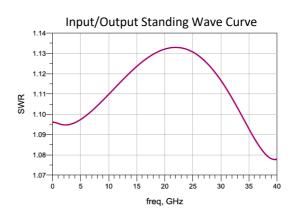
#### **Electrical Characteristics (Ta = 25°C)**

Symbol	Parameter		Value			Unit
			Min	Typical	Max	
VSWRin	Input Standing Wave		-	1.2	•	ı
VSWRout	Output Standing Wave		-	1.2	•	-
		AMT1618	-	0.5	•	dB
IL	Insertion Loss	AMT1619	-	1	•	dB
		AMT1620	-	2	•	dB
		AMT1621	-	4	ı	dB

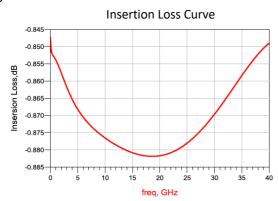
## **Typical Performance**

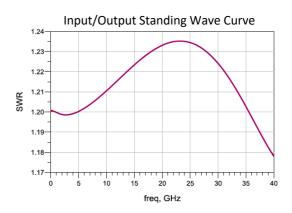




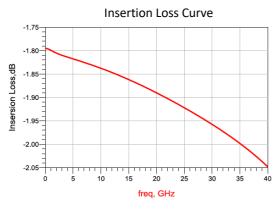


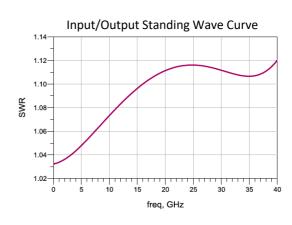
1dB



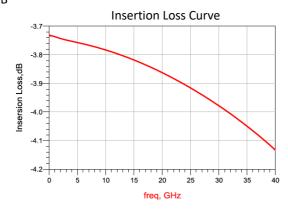


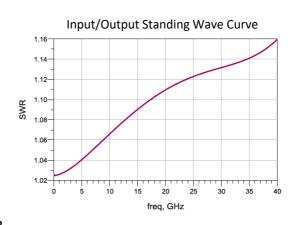
2dB



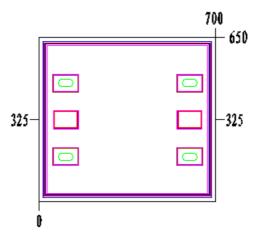


4dB

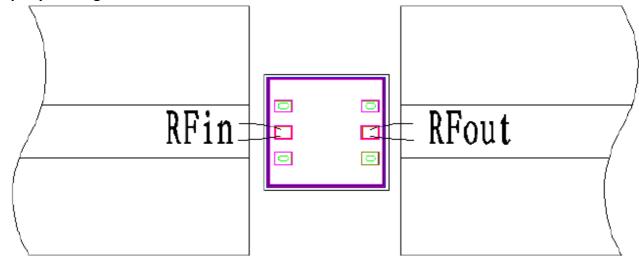




# Chip Dimensions (Unit: $\mu$ m)



# **Chip Layout Diagram**



Please see Appendix A for details.