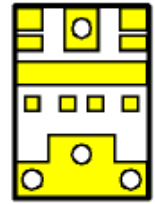


**AMT3301**  
**DC – 40GHz Adjustable Attenuator**



**Key Features :**

- Frequency range : DC – 40GHz
- Attenuation range : 0 – 3.5dB
- Phase shift range : 0 ~ 35°
- Input/output standing wave : 1.3 : 1 (max 1.5)
- Chip dimensions : 0.7mm x 1mm x 0.127mm
- Applications : wireless communication, transceiver module, radio telecommunication etc.

**Description :**

AMT3301 is a high performance adjustable attenuator, this chip is designed with ground through metal vias on the back technology. No electric bias is required in 0.8 – 1.2GHz; through gold wire bond, attenuation can be adjusted by 0.5dB per step between 0dB ~ 3.5dB.

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

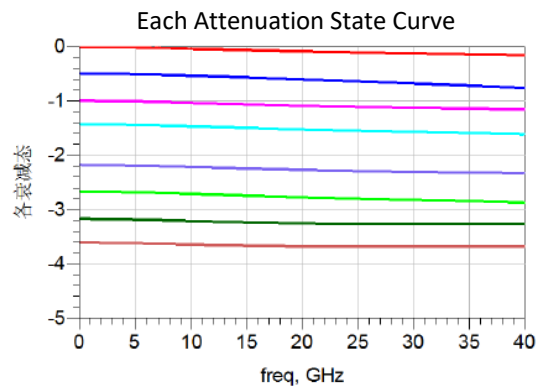
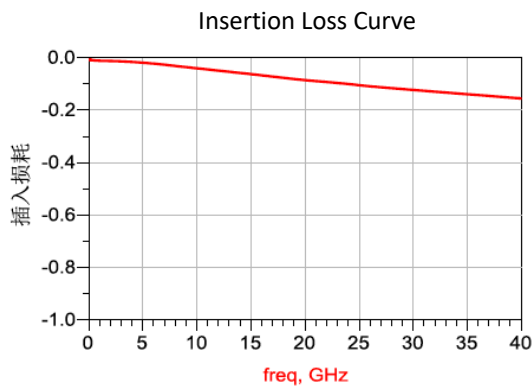
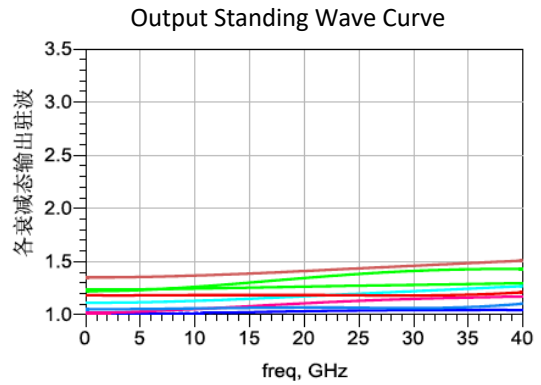
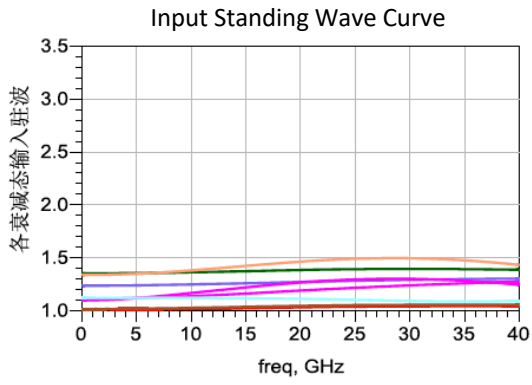
Symbol	Parameter	Value	Remark
Pin	Input power	+33dBm	
Ta	Operation Temperature	-55 ~ +85°C	
Tstg	Storage Temperature	-65 ~ +150°C	

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

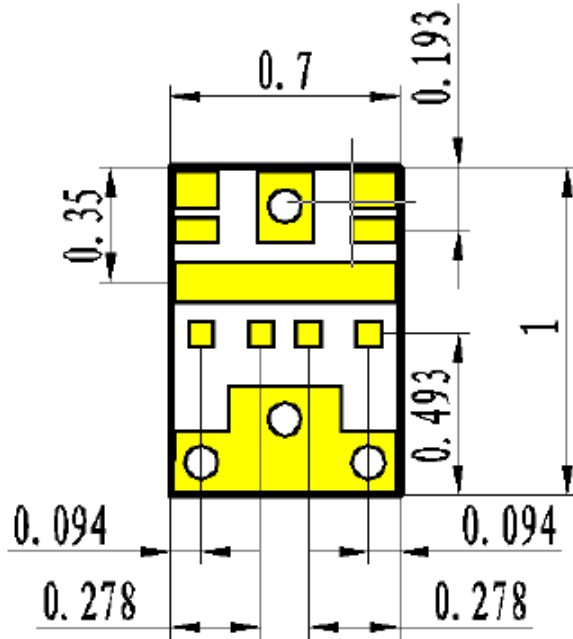
**Electrical Characteristics (Ta = 25°C)**

Symbol	Parameter	Value			Unit
		Min	Typical	Max	
IL	Insertion loss	-	0.1	0.3	dB
$\Delta A_i$	Attenuation resolution	-	$\pm (0.3 + 5\% A_i)$	$\pm(0.3 + 10\% A_i)$	dB
VSWR	Input/output standing wave	-	1.3	1.5	-

### Typical Test Curve



Chip Dimensions (Unit :  $\mu\text{m}$ )



Chip Layout Diagram

