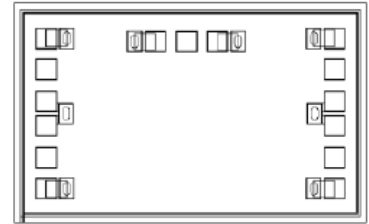


**AMT1806-1**  
**12 - 18GHz Power Divider Chip**



**Key Features :**

- Frequency range : 12 – 18GHz
- Input/output standing wave : 1.4
- Insertion loss : 1.4dB
- Isolation : 30dB
- Chip dimensions : 1.7mm x 1.05mm x 0.1mm
- Applications : wireless communication, transceiver module, radio telecommunication etc.

**Description :**

AMT1806-1 is a 1-to-4 power divider chip designed by Gallium Arsenide (GaAs) process, it covers 12 – 18GHz frequency range, with typical 30dB isolation. This chip is designed with ground through metal vias on the back technology.

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

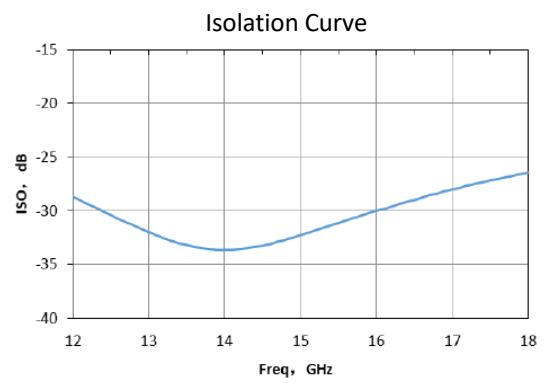
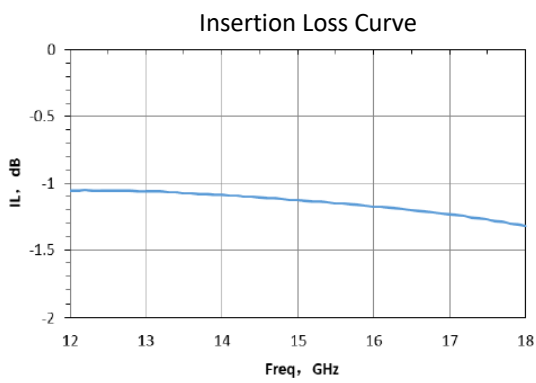
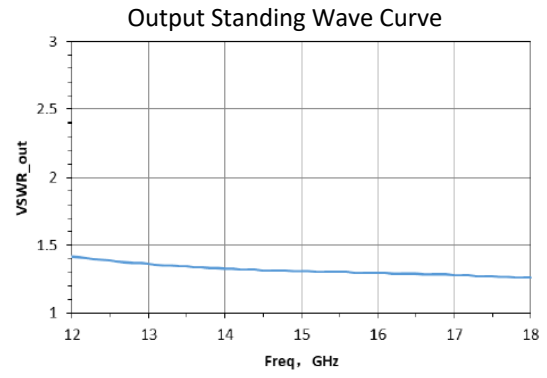
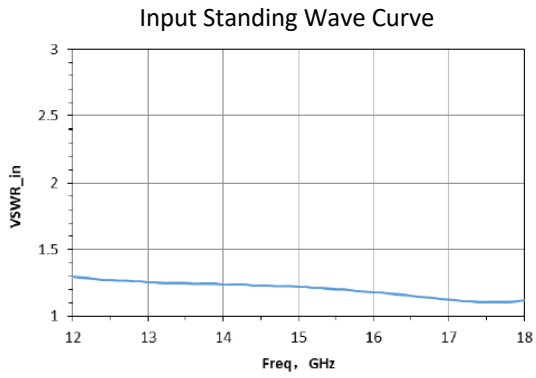
Symbol	Parameter	Value	Remark
Pin	Input Power	+37dBm	
Tch	Operating Temperature	150°C	
Tm	Sintering Temperature	310°C	30s, N <sub>2</sub> protection
Tstg	Storage Temperature	-65 ~ +150°C	

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

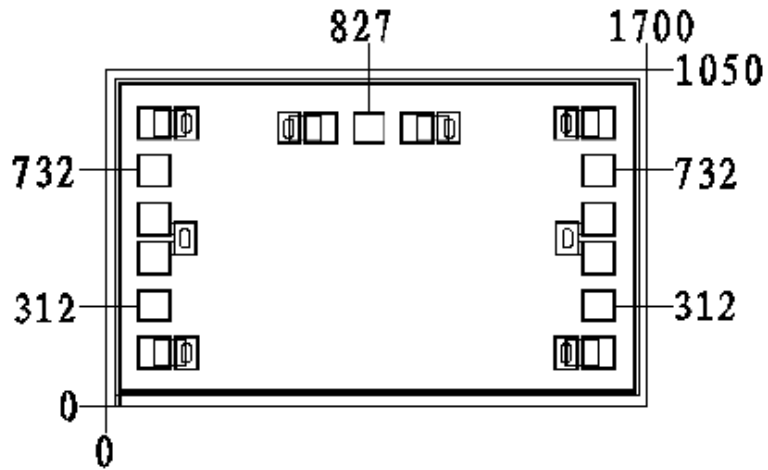
**Electrical Characteristics (Ta = 25°C)**

Symbol	Parameter	Test Conditions	Value			Unit
			Min	Typical	Max	
VSWR_in	Input Standing Wave	Pin = 0 dBm F : 12 ~ 18GHz	-	1.4	1.6	
VSWR_out	Output Standing Wave		-	1.4	1.6	
IL	Insertion Loss		-	1.4	1.6	dB
ISO	Isolation		25	30	-	dB

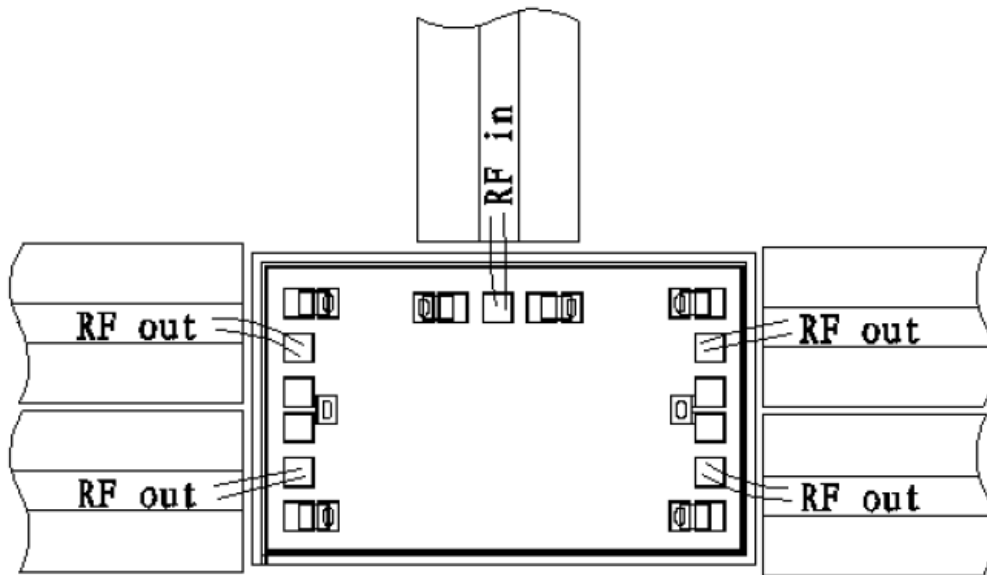
### Typical Performance



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



### Chip Layout Diagram



Please see Appendix A for details.