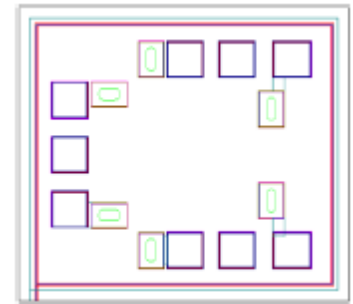


**AMT1804-2**  
**12 – 18GHz Power Divider Chip**



**Key Features :**

- Frequency range : 12 – 18GHz
- Input/output standing wave : 1.3
- Insertion loss : 0.4dB
- Isolation : 20dB
- Chip dimensions : 0.9mm x 0.8mm x 0.1mm
- Applications : wireless communication, transceiver module, radio telecommunication etc.

**Description :**

AMT1804-2 is a 1-to-2 power divider chip designed by Gallium Arsenide (GaAs) process, it covers 12 – 18GHz frequency range, with typical 20dB isolation. This chip is designed with ground through metal vias on the back technology.

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

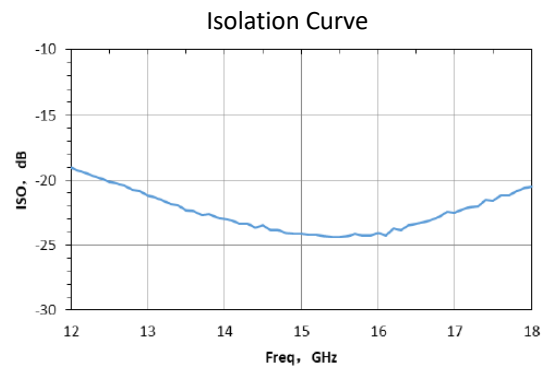
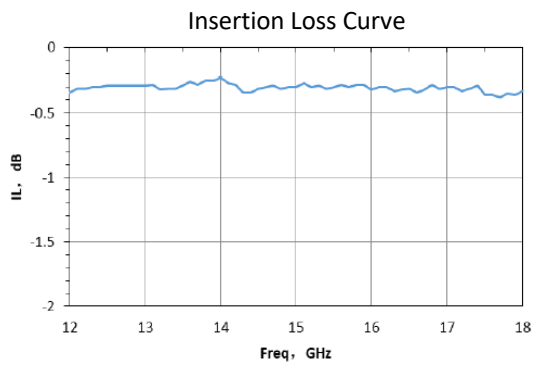
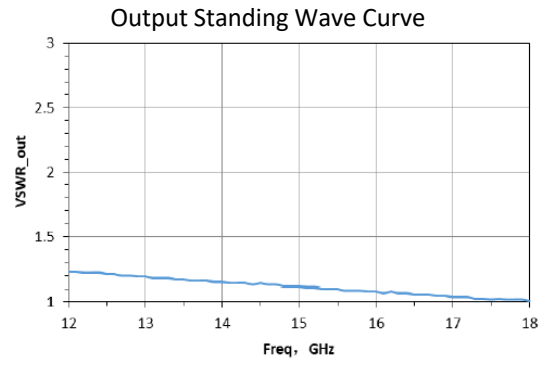
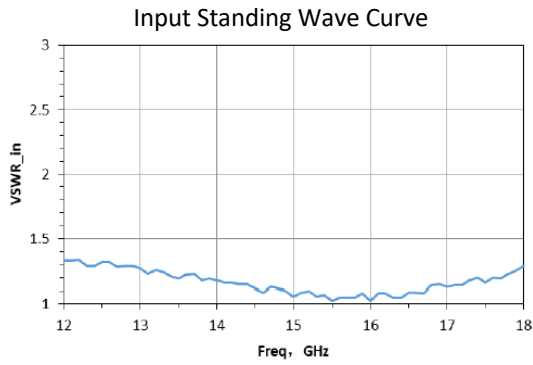
Symbol	Parameter	Value	Remark
Pin	Input Power	+37dBm	
Tch	Operating Temperature	150°C	
Tm	Sintering Temperature	310°C	30s, N <sub>2</sub> protection
Tstg	Storage Temperature	-65 ~ +150°C	

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

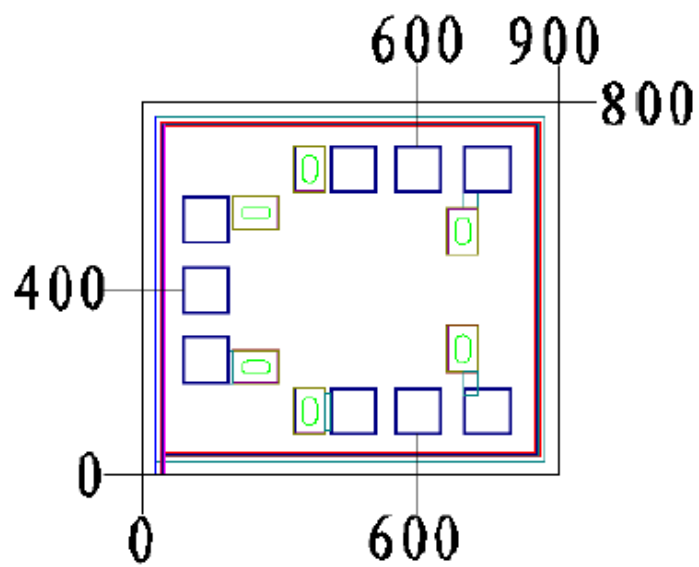
**Electrical Characteristics (Ta = 25°C)**

Symbol	Parameter	Test Conditions	Value			Unit
			Min	Typical	Max	
VSWR_in	Input Standing Wave	Pin = 0 dBm F : 12 ~ 18GHz	-	1.3	1.7	
VSWR_out	Output Standing Wave		-	1.3	1.5	
IL	Insertion Loss		-	0.4	0.5	dB
ISO	Isolation		18	20	-	dB

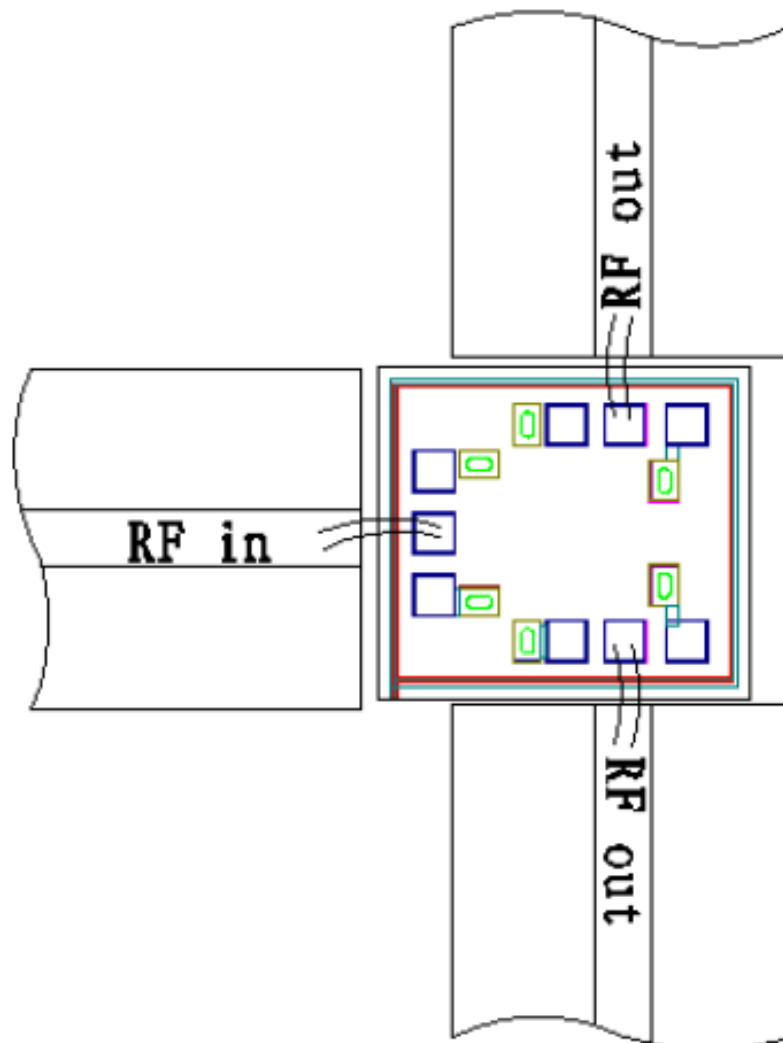
## Typical Performance



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



Chip Layout Diagram



Please see Appendix A for details.