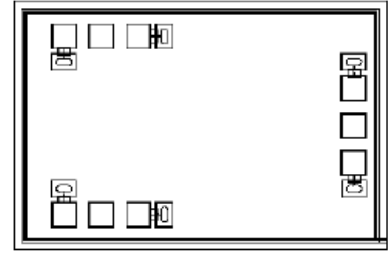


**AMT1803**  
**6 – 18GHz Power Divider Chip**



**Key Features :**

- Frequency range : 6 – 18GHz
- Input/output standing wave : 1.2
- Insertion loss : 0.8dB
- Isolation : 20dB
- Chip dimensions : 1.5mm x 1.0mm x 0.1mm
- Applications : wireless communication, transceiver module, radio telecommunication etc.

**Description :**

AMT1803 is a 1-to-2 power divider chip designed by Gallium Arsenide (GaAs) process, it covers 6 – 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)**

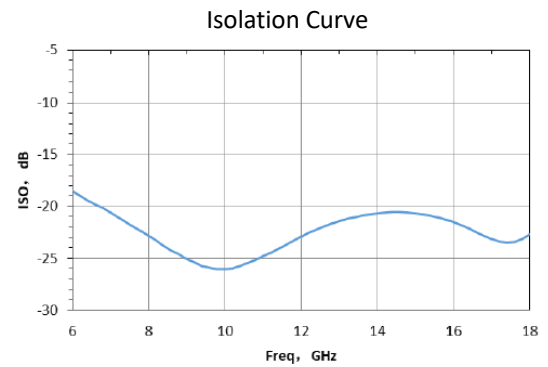
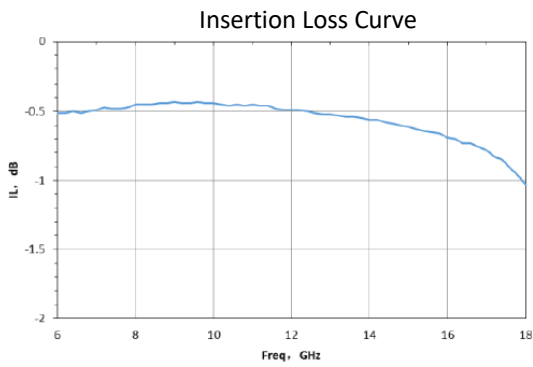
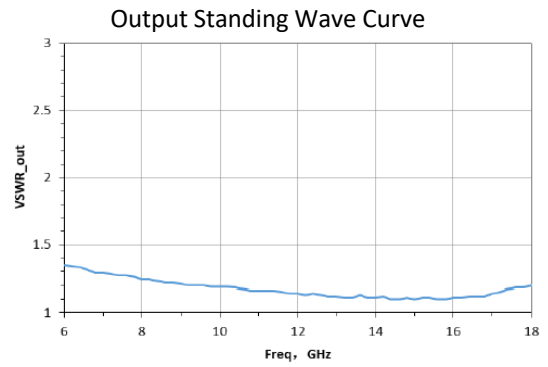
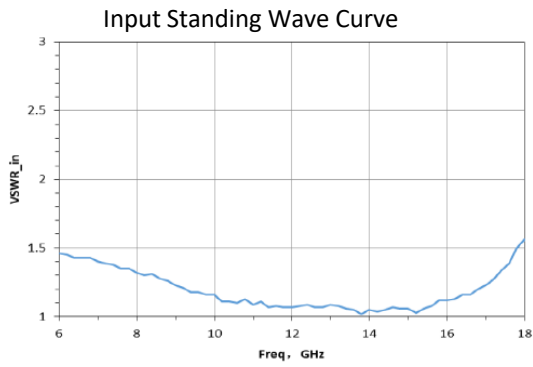
Symbol	Parameter	Value	Remark
Pin	Input Power	+37dBm	
Tch	Operating Temperature	150°C	
Tm	Sintering Temperature	310°C	30s, N <sub>2</sub> protection
Tstg	Storage Temperature	-65 ~ +150°C	

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

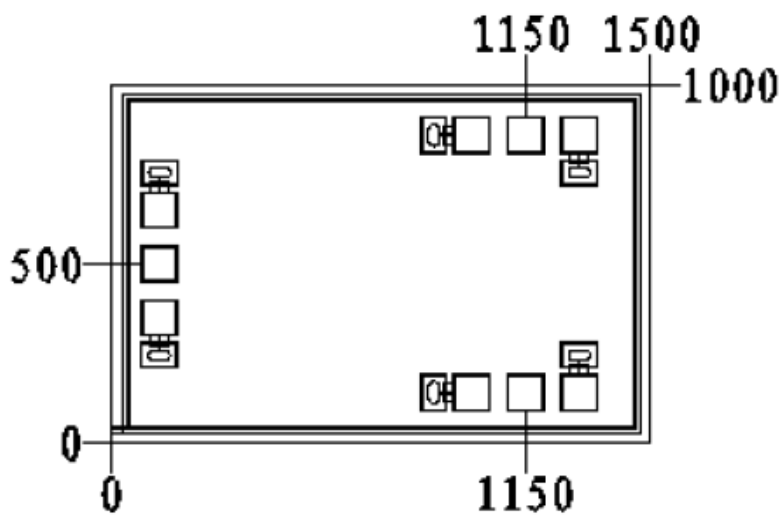
**Electrical Characteristics (Ta = 25°C)**

Symbol	Parameter	Test Conditions	Value			Unit
			Min	Typical	Max	
VSWR_in	Input Standing Wave	Pin = 0 dBm F : 6 ~ 18GHz	-	1.2	1.6	
VSWR_out	Output Standing Wave		-	1.2	1.6	
IL	Insertion Loss		-	0.8	1	dB
ISO	Isolation		17	25	-	dB

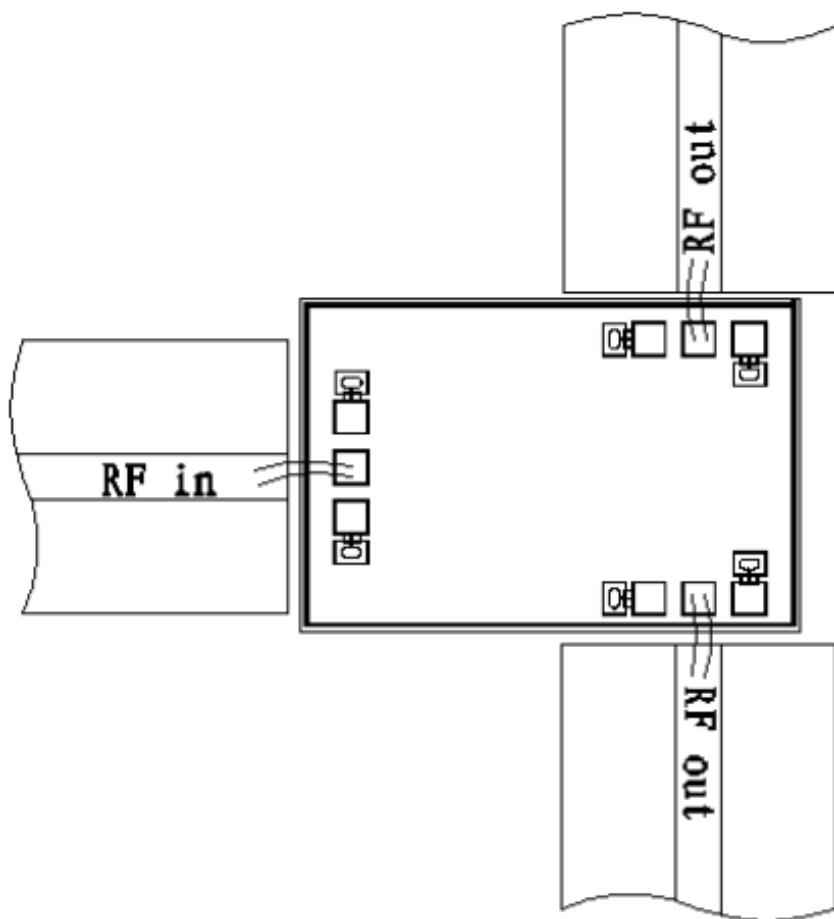
## Typical Performance



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



### Chip Layout Diagram



Please see Appendix A for details.