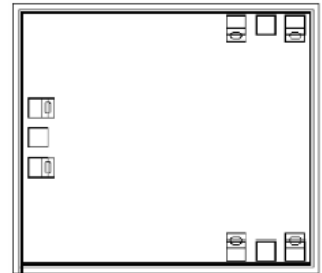


AMT1804-1
30 – 40GHz Power Divider Chip



Key Features :

- Frequency range : 30 – 40GHz
- Input/output standing wave : 1.3
- Insertion loss : 0.3dB
- Isolation : 20dB
- Chip dimensions : 1.55mm x 1.35mm x 0.1mm
- Applications : wireless communication, transceiver module, radio telecommunication etc.

Description :

AMT1804-1 is a 1-to-2 power divider chip designed by Gallium Arsenide (GaAs) process, it covers 30 – 40GHz 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)

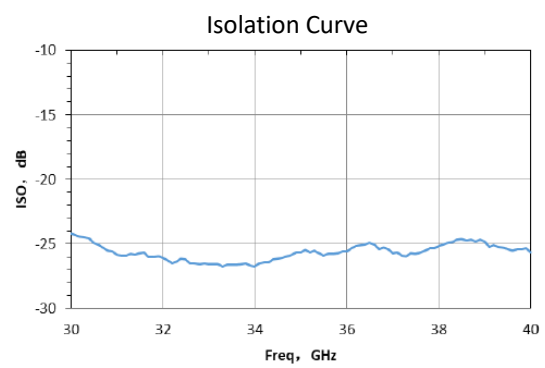
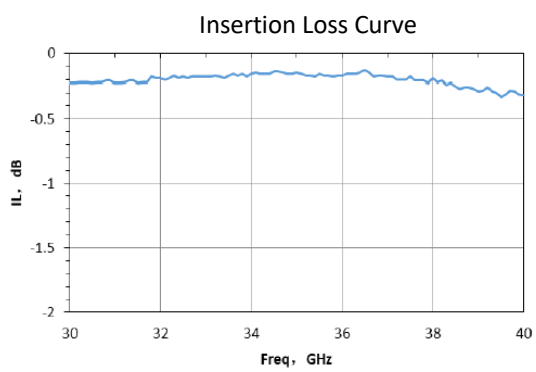
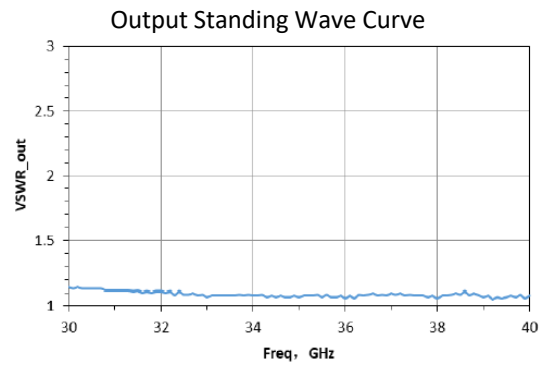
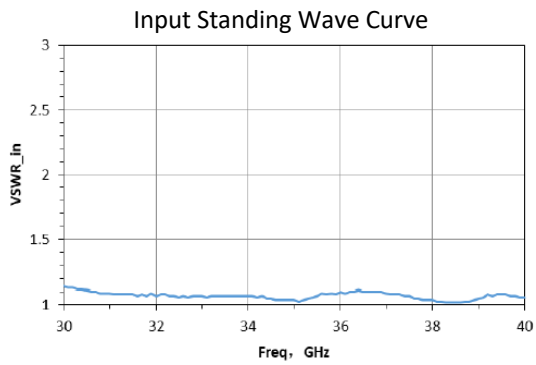
Symbol	Parameter	Value	Remark
Pin	Input Power	+37dBm	
Tch	Operating Temperature	150°C	
Tm	Sintering Temperature	310°C	30s, N ₂ protection
Tstg	Storage Temperature	-65 ~ +150°C	

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

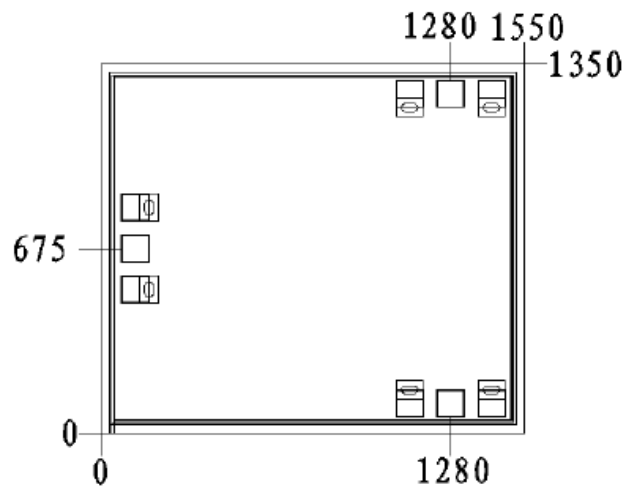
Electrical Characteristics (Ta = 25°C)

Symbol	Parameter	Test Conditions	Value			Unit
			Min	Typical	Max	
VSWR_in	Input Standing Wave	Pin = 0 dBm F : 30 ~ 40GHz	-	1.3	1.7	
VSWR_out	Output Standing Wave		-	1.3	1.4	
IL	Insertion Loss		-	0.3	0.5	dB
ISO	Isolation		15	20	-	dB

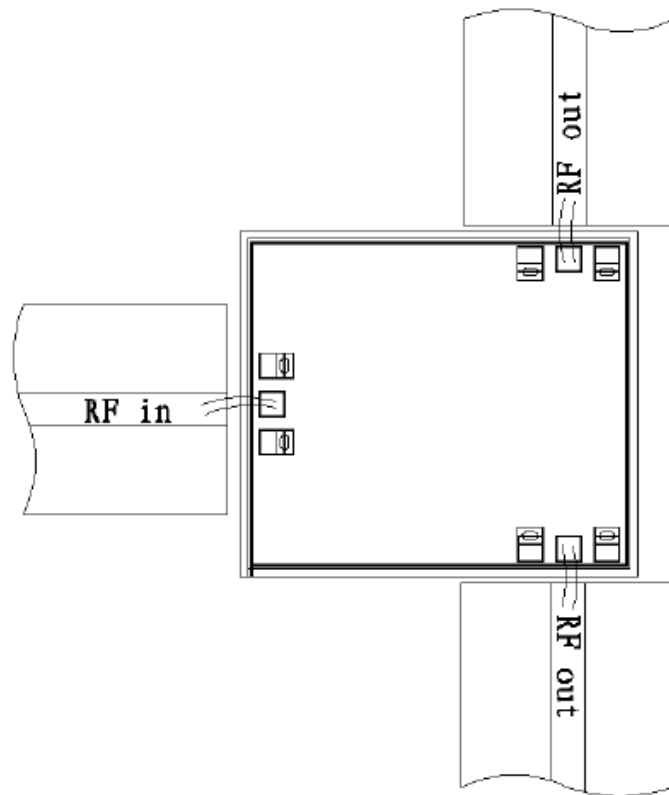
Typical Performance



Chip Dimensions (Unit : μm)



Chip Layout Diagram



Please see Appendix A for details.