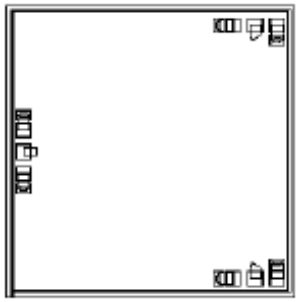
AMT1802
2 – 22GHz Power Divider Chip



Key Features :

- Frequency range : 2 – 22GHz
- Input/output standing wave : 1.3
- Insertion loss : 0.9dB
- Isolation : 20dB
- Chip dimensions : 1.98mm x 2.0mm x 0.1mm
- Applications : wireless communication, transceiver module, radio telecommunication etc.

Description :

AMT1802 is a 1-to-2 power divider chip designed by Gallium Arsenide (GaAs) process, it covers 2 – 22GHz 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	

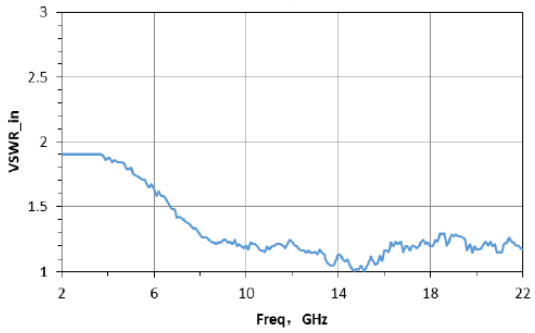
[1] Operation outside any of the Absolute Maximum Ratings may cause permanent device damage.

Electrical Characteristics (Ta = 25°C)

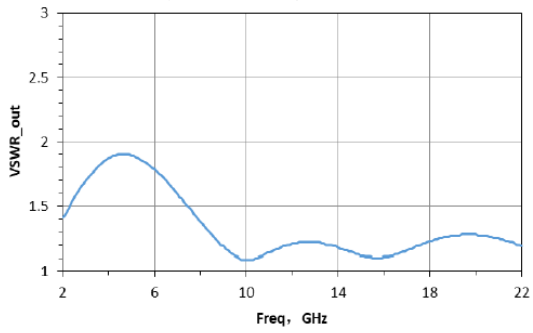
Symbol	Parameter	Test Conditions	Value			Unit
			Min	Typical	Max	
VSWR_in	Input Standing Wave	Pin = 0 dBm F : 2 ~ 22GHz	-	1.3	2	
VSWR_out	Output Standing Wave		-	1.3	2	
IL	Insertion Loss		0.5	0.9	-	dB
ISO	Isolation		13	20	-	dB

Typical Performance

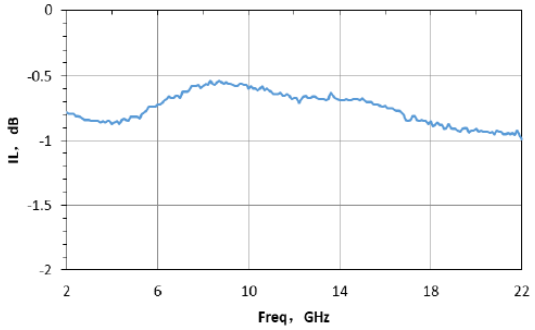
Input Standing Wave Curve



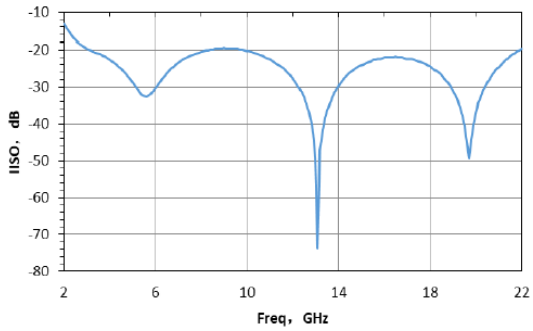
Output Standing Wave Curve



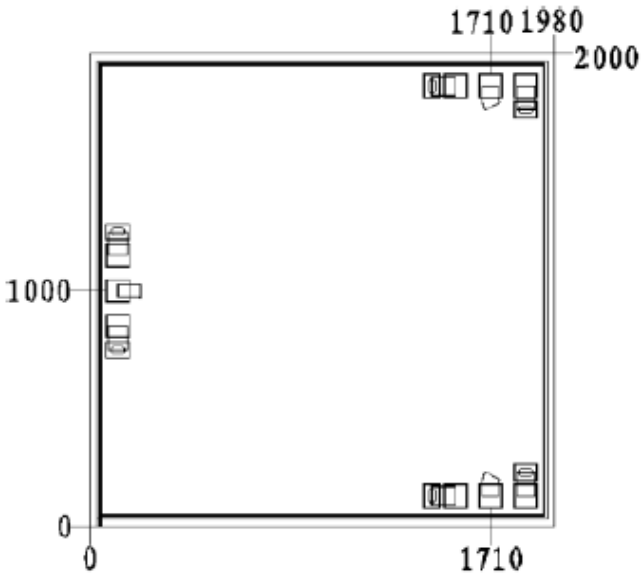
Insertion Loss Curve



Isolation Curve



Chip Dimensions (Unit : μm)



Chip Layout Diagram