

AMT1812-02
DC – 5GHz Lowpass Filter Chip



Key Features :

- Pass band frequency : DC – 5GHz
- Pass band loss : 1.4dB@5GHz
- Stop band rejection : 23dB@7.7GHz; 37dB@8.2GHz
- Input/output standing wave : 1.4/1.4
- Chip dimensions : 1.5mm x 0.7mm x 0.1mm
- Applications : wireless communication, transceiver module, radio telecommunication etc.

Description :

AMT1812-02 is a high performance lowpass filter chip, it is designed by Gallium Arsenide (GaAs) process. This chip is designed with ground through metal vias on the back technology. All chip products are 100% RF tested. Its pass band frequency range is DC – 5GHz, stop band rejection at 7.7GHz is typical 23dB, at 8.2GHz is typical 37dB.

Absolute Maximum Ratings (Ta = 25°C)

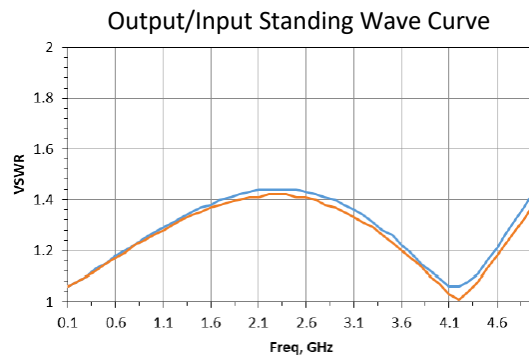
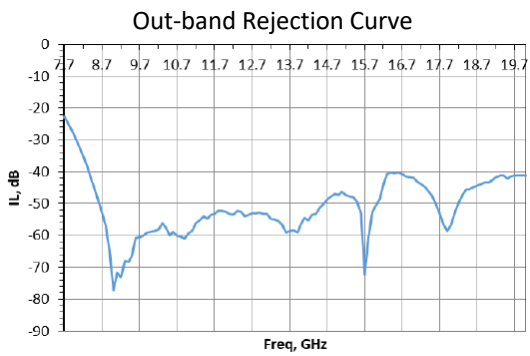
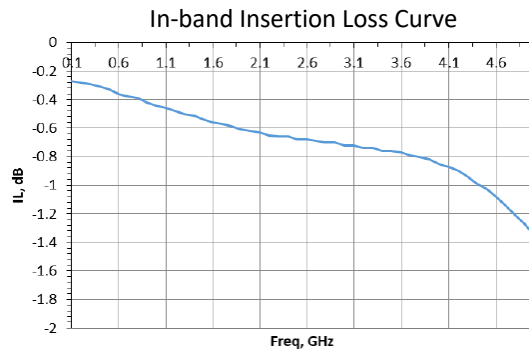
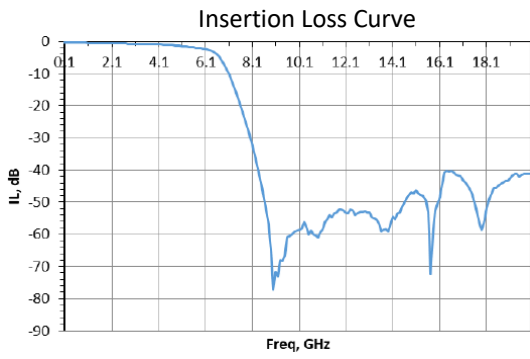
Symbol	Parameter	Value	Remark
Pin	Input power	30dBm	
Tm	Sintering Temperature	310°C	30s, N ₂ protection
Tstg	Storage Temperature	-65 ~ +150°C	

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

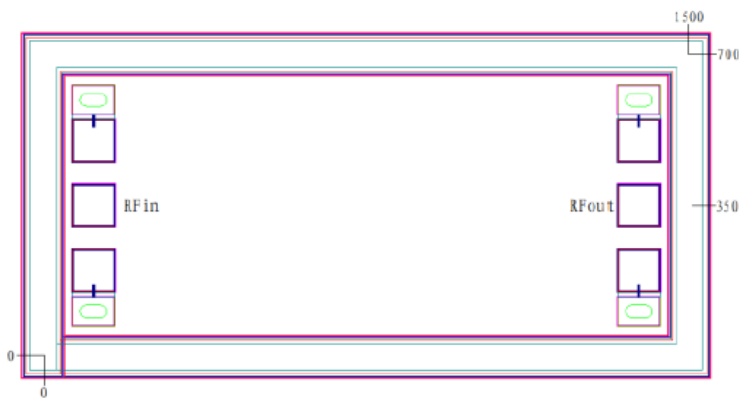
Electrical Characteristics (Ta = 25°C)

Symbol	Parameter	Value			Unit	
		Min	Typical	Max		
IL	Pass band loss	-	1.4	1.5	dB	
SS	Out-band rejection	7.7GHz	21.5	23	-	dB
		8.2GHz	34	37	-	
VSWR	In-band standing wave	-	1.4	1.5	-	

Typical Performance



Chip Dimensions (Unit : μm)



Chip Layout Diagram



Please see Appendix A for details.