

AMT3401
5 – 8.5GHz Filter



Key Features :

- Pass band frequency : 5 – 8.5GHz
- Centre insertion loss : 2dB
- In-band standing wave : 1.6
- Stop-band suppression : $\geq 30\text{dBc}@2 \sim 4\text{GHz}$;
 $\geq 40\text{dBc}@10 \sim 14\text{GHz}$;
 $\geq 50\text{dBc}@14 \sim 15\text{GHz}$;
 $\geq 40\text{dBc}@15 \sim 17\text{GHz}$;
- Chip dimensions : 7.95mm x 5.15mm x 0.381mm
- Applications : wireless communication, transceiver module, radio telecommunication etc.

Description :

AMT3401 is a high performance ceramic band-pass filter, this chip is designed with ground through metal vias on the back technology. Pass band frequency range is 5 – 8.5GHz, in-band insertion loss is less than 2.5dB, in –band standing wave less than 1.8.

Absolute Maximum Ratings (Ta = 25°C)

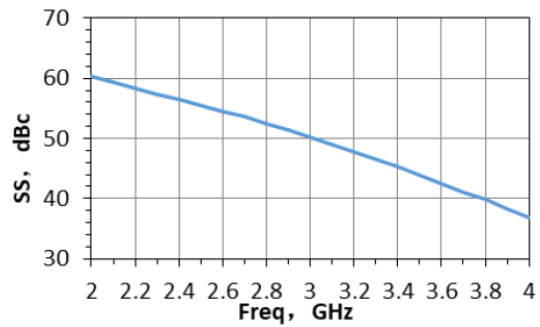
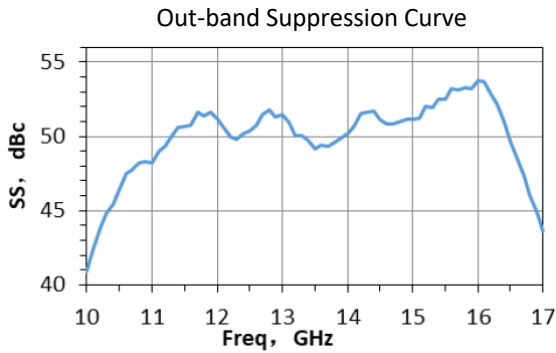
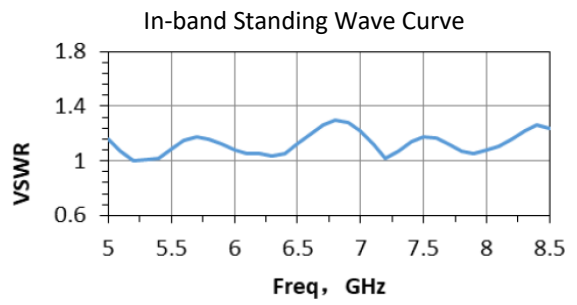
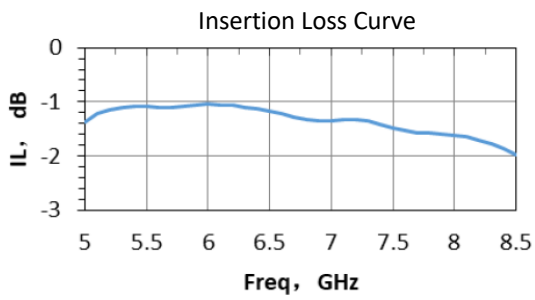
Symbol	Parameter	Value	Remark
Pin	Input power	35dBm	
Ta	Operation Temperature	-55 ~ +85°C	
Tstg	Storage Temperature	-65 ~ +150°C	

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

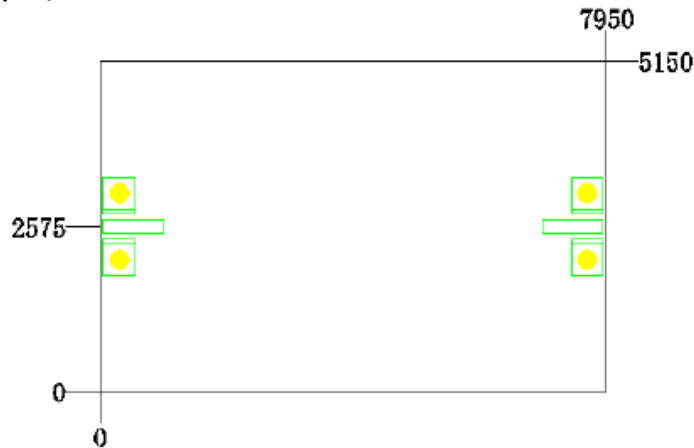
Electrical Characteristics (Ta = 25°C)

Symbol	Parameter		Test Conditions	Value			Unit
				Min	Typical	Max	
IL ₀	Centre insertion loss		F : 2 ~ 17GHz	-	2	2.5	dB
SS	Out-band suppression	2 ~ 4GHz		30	40	-	dBc
		10 ~ 14GHz		40	45		
		14 ~ 15GHz		50	55		
		15 ~ 17GHz		40	45		
VSWR	In-band standing wave		-	1.6	1.8	-	
B ₁	In-band fluctuation		-	1	1.3	dB	

Typical Test Curve



Chip Dimensions (Unit : μm)



Chip Layout Diagram

