

AMT3405
11 – 14.5GHz Filter



Key Features :

- Pass band frequency : 11 – 14.5GHz
- Centre insertion loss : 2dB
- In-band standing wave : 1.8
- Stop-band suppression : 30dBc@2 ~ 9.5GHz;
50dBc@20 ~ 29GHz;
- Chip dimensions : 5.95mm x 2.95mm x 0.254mm
- Applications : wireless communication, transceiver module, radio telecommunication etc.

Description :

AMT3405 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 11 – 14.5GHz, in-band insertion loss is less than 2dB, in-band standing wave less than 1.8.

Absolute Maximum Ratings (Ta = 25°C)

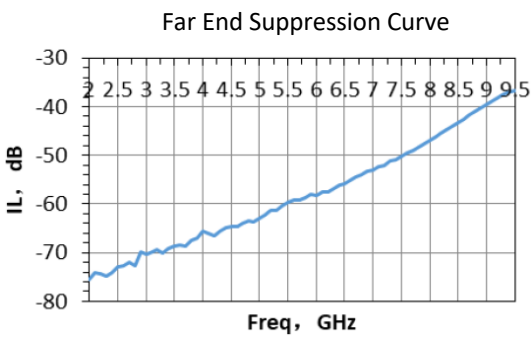
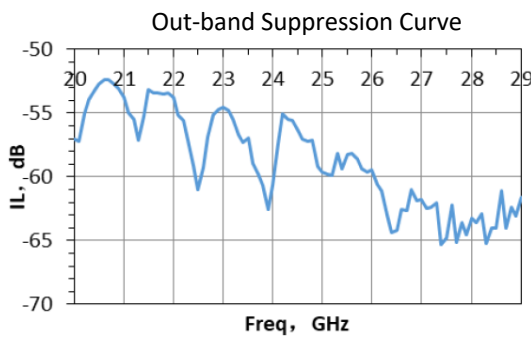
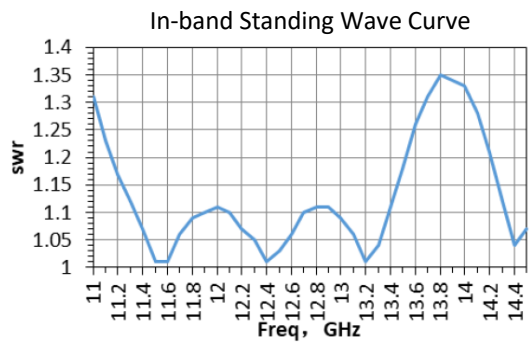
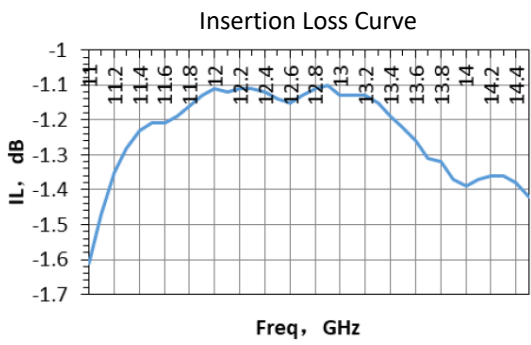
| Symbol | Parameter | Value | Remark |
|--------|-----------------------|--------------|--------|
| Pin | Input signal power | 35dBm | |
| Ta | Operation Temperature | -55 ~ +85°C | |
| Tstg | Storage Temperature | -65 ~ +150°C | |

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

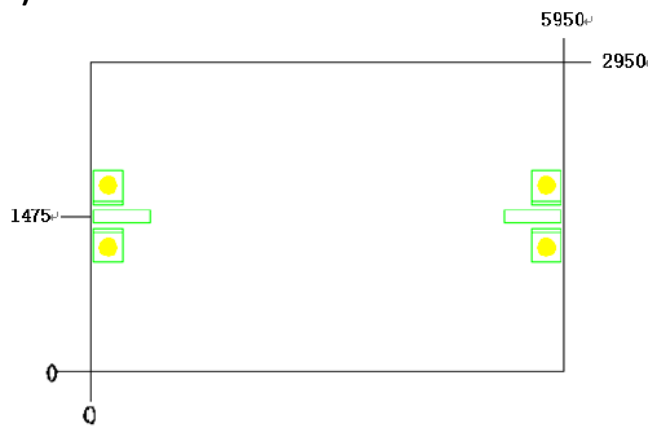
Electrical Characteristics (Ta = 25°C)

| Symbol | Parameter | | Test Conditions | Value | | | Unit |
|-----------------|-----------------------|------------|-----------------|-------|---------|-----|------|
| | | | | Min | Typical | Max | |
| IL ₀ | Centre insertion loss | | F : 2 ~ 29GHz | - | 1.5 | 2 | dB |
| SS | Out-band suppression | 2 ~ 9.5GHz | | 30 | 40 | - | dBc |
| | | 20 ~ 29GHz | | 50 | 55 | | |
| VSWR | In-band standing wave | | | - | 1.4 | 1.8 | - |
| B ₁ | In-band fluctuation | | - | 0.5 | 1 | dB | |

Typical Test Curve



Chip Dimensions (Unit : μm)



Chip Layout Diagram

