AMT3404 8 – 11.5GHz Filter



## Key Features :

- Pass band frequency : 8 11.5GHz
- Centre insertion loss : 1.8dB
- In-band standing wave : 1.8
- Stop-band suppression : 30dBc@2~6.5GHz;
  - 40dBc@16 ~ 23GHz;
- Chip dimensions : 5.45mm x 3.45mm x 0.254mm
- Applications : wireless communication, transceiver module, radio telecommunication etc.

#### **Description**:

AMT3404 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 8 – 11.5GHz, in-band insertion loss is less than 1.8dB, in–band standing wave less than 1.8.

#### Absolute Maximum Ratings (Ta = 25°C)

| Symbol | Parameter             | Value        | Remark |
|--------|-----------------------|--------------|--------|
| Pin    | Input signal power    | 35dBm        |        |
| Та     | 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 <sub>0</sub> | Centre insertion loss |            |                 | -     | 2       | 2.5 | dB   |
| SS              | Out-band suppression  | 2 ~ 6.5GHz |                 | 30    | 32      | -   | dBc  |
|                 |                       | 16 ~ 23GHz | F : 2 ~ 17GHz   | 40    | 50      |     |      |
| VSWR            | In-band standing wave |            |                 | -     | 1.5     | 1.8 | -    |
| B1              | In-band fluctuation   |            |                 | -     | 0.5     | 1   | dB   |

# **Typical Test Curve**



## **Chip Dimensions (Unit : μm)**



### **Chip Layout Diagram**



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