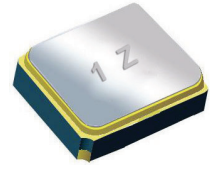


Surface Mount 1591.5 MHz SAW Filter

AFS14A35-1591.5-T2



RoHS
Compliant



1.4 x 1.1 x 0.7 mm

FEATURES:

- 1.4 x 1.1 x 0.7 mm low profile SMT package
- Low Insertion loss
- Excellent selectivity with high out-of-band rejection

APPLICATIONS:

- Wireless Communication
- Remote Control
- Cellular Phones

ELECTRICAL SPECIFICATIONS:

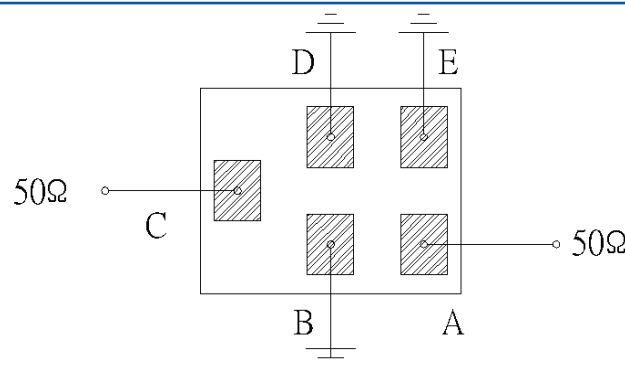
Maximum Ratings

| Item | Value |
|-----------------------------|-----------------|
| Input Power Level | +10 dBm max. |
| DC Permissive Voltage | 3.0V DC max. |
| Operating Temperature Range | -40°C to + 85°C |
| Storage Temperature Range | -40°C to + 85°C |

| Parameters | Minimum | Typical | Maximum | Units | Notes |
|---|---------|---------|---------|----------|---------------|
| Center Frequency (f_c) | | 1591.5 | | MHz | |
| Insertion Loss (IL) | | 2.4 | 3.7 | dB | 1574~1609 MHz |
| 3-dB Bandwidth | | 35 | | MHz | |
| Amplitude Ripple | | 1.3 | 2.6 | dB | 1574~1609 MHz |
| Worst-Case Input / Output Return Loss | 7.7 | 9.5 | | dB | 1574~1609 MHz |
| Group Delay Variation | | 17 | 50 | ns | 1574~1609 MHz |
| Stop-band Attenuation (Referenced to 0.0 dB) | 28 | 34 | | dB | 10 ~1200 MHz |
| | 28 | 34 | | | 1200~1450 MHz |
| | 20 | 37 | | | 1450~1540 MHz |
| | 9 | 31 | | | 1626~1710 MHz |
| | 30 | 37 | | | 1710~2000 MHz |
| | 30 | 37 | | | 2000~2500 MHz |
| Temperature Coefficient of frequency | | -36 | | ppm/°C | |
| Source Impedance (Z_S) | | 50 | | Ω | See note # 1 |
| Load Impedance (Z_L) | | 50 | | Ω | See note # 1 |

Note #1: No matching network required for operation into 50 Ω 's

TEST CIRCUIT:

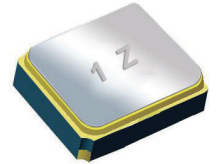


Surface Mount 1591.5 MHz SAW Filter

AFS14A35-1591.5-T2

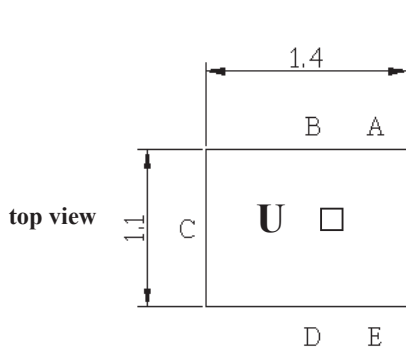


RoHS
Compliant

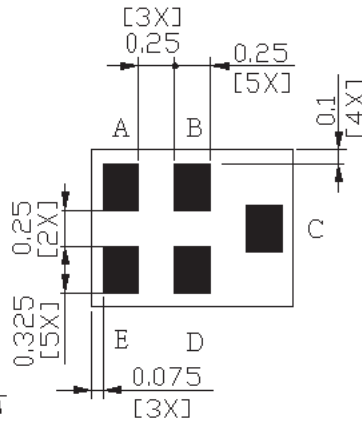


1.4 x 1.1 x 0.7 mm

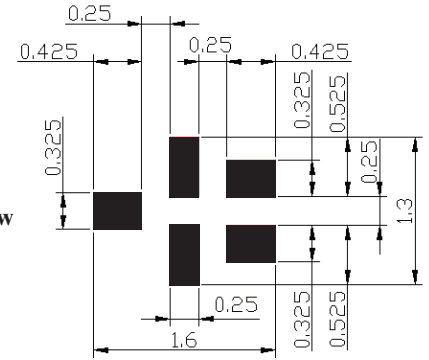
OUTLINE DIMENSIONS:



side view



Recommended Land Pattern:



■ : Land Pattern
Unit : mm

| | |
|-----------------|--------|
| C: | Input |
| A: | Output |
| B, D, E: | Ground |

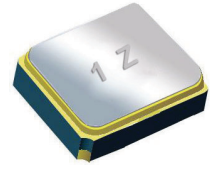
*All Dimensions are in mm

□ Year/Month Code (Follow the table)

| Year/Month | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 2009 | A | B | C | D | E | F | G | H | J | K | L | M |
| 2010 | N | P | Q | R | S | T | U | V | W | X | Y | Z |
| 2011 | A | B | C | D | E | F | G | H | J | K | L | M |
| 2012 | N | P | Q | R | S | T | U | V | W | X | Y | Z |
| 2013 | A | B | C | D | E | F | G | H | J | K | L | M |
| 2014 | N | P | Q | R | S | T | U | V | W | X | Y | Z |

Surface Mount 1591.5 MHz SAW Filter

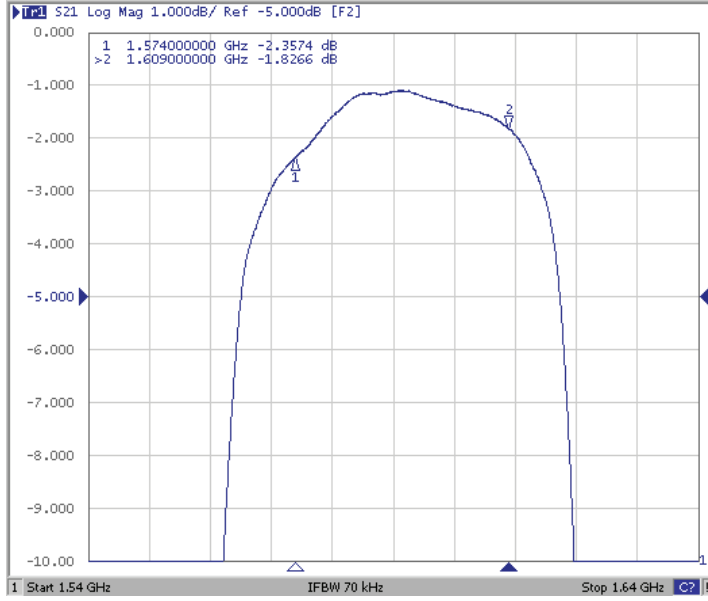
AFS14A35-1591.5-T2



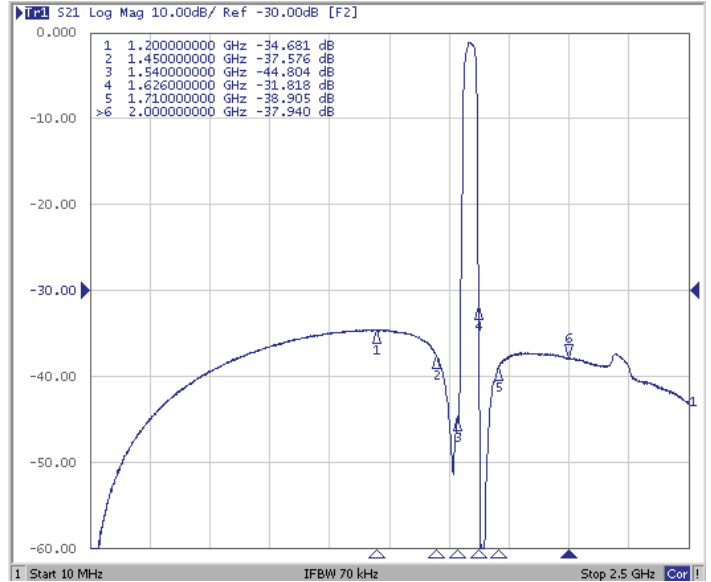
1.4 x 1.1 x 0.7 mm

FREQUENCY CHARACTERISTICS:

Filter Frequency Response (Narrowband)

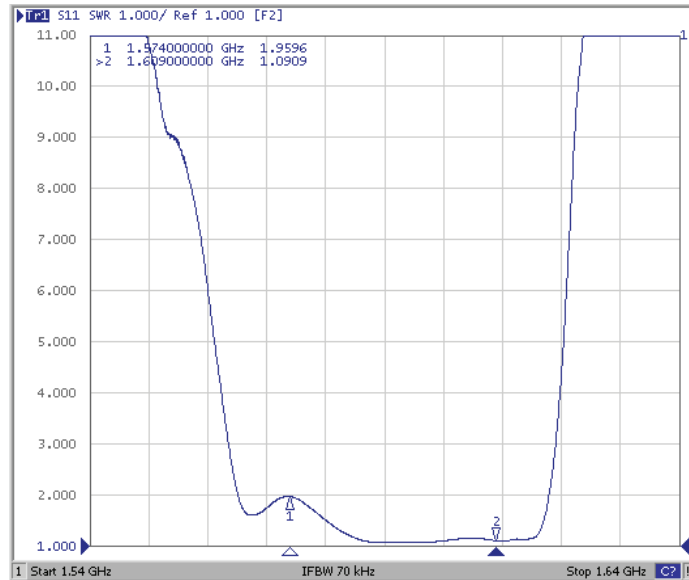


Filter Frequency Response (Wideband)



REFLECTION FUNCTIONS:

S11



S22

