



Advanced Microwave Technologies

195MHz SAW Delay Line
25MHz Bandwidth/10usec
Part Number : AD1952530

Features

- ✧ SAW Delay-Line
- ✧ Single-Ended Operation
- ✧ DIP Package
- ✧ Electrostatics Sensitive Device (ESD)

Specifications

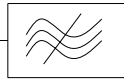
| Parameter | Unit | Minimum | Typical | Maximum |
|---|------------------------------|---------|---------|---------|
| Center Frequency | MHz | 193.5 | 195 | 196.5 |
| Insertion Loss | dB | - | 20 | 26 |
| 3 dB Bandwidth | MHz | 25 | 29.21 | - |
| 30 dB Bandwidth | MHz | - | 43.25 | 45 |
| Passband Variation($f_0 \pm 12.5\text{MHz}$) | dB | - | 0.7 | 1.5 |
| Group Delay Variation($f_0 \pm 12.5\text{MHz}$) | nsec | - | 260 | 300 |
| Absolute Delay | usec | 9.95 | 10 | 10.05 |
| Ultimate Rejection | dB | 30 | 34 | - |
| Material Temperature coefficient | KHz/°C | -18.33 | | |
| Substrate Material | - | YZ LN | | |
| Ambient Temperature | °C | 25 | | |
| Operating Temperature Range | °C | -40 | - | +85 |
| Storage Temperature Range | °C | -45 | - | +105 |
| DC Voltage | V | 0 | | |
| Input Power | dBm | - | - | 10 |
| ESD Class | - | 1 | | |
| Package Size | DIP7320 (73.28x19.94x6.5mm3) | | | |

Notes:

1. All specifications are based on the test circuit shown;
2. In production, all specifications are measured by Agilent Network analyzer and full 2 port calibration at room temperature;
3. Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances;
4. This is the optimum impedance in order to achieve the performance show.

Matching Configuration

INPUT
50 Ω

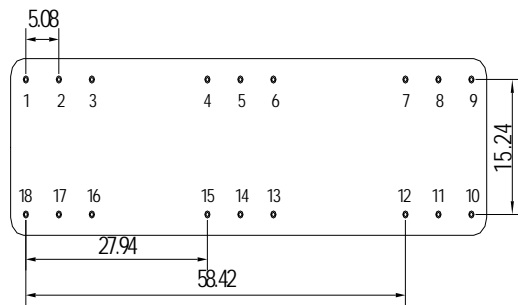
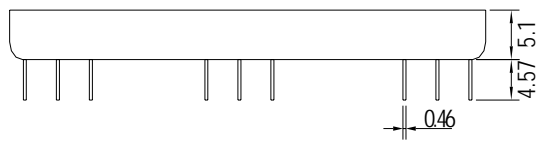
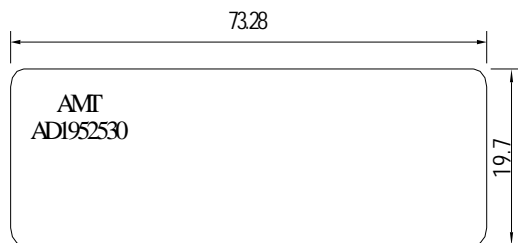


OUTPUT
50 Ω

Source/Load Impedance=50 ohm

Notes - Component values may change depending
on board layout.

Package Dimension



Pad Configuration:

Input 4

Output 11

Ground All Others

Marking Configuration:

1) AMT : Manufacturer Name

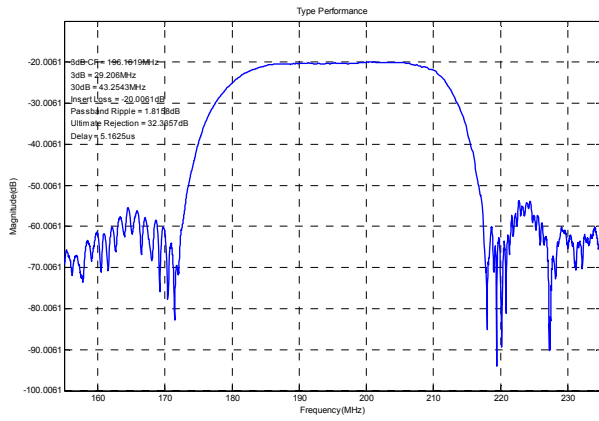
2) AD1952530 : Part Number

Package: DIP7320

Unit: mm

Typical Performance

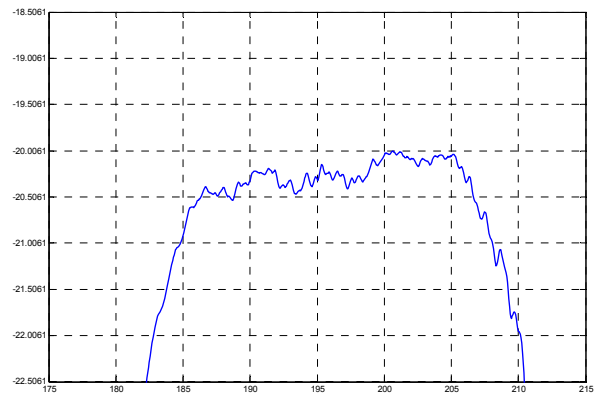
Frequency Response



Horizontal: 10MHz/Div

Vertical: 10dB/Div

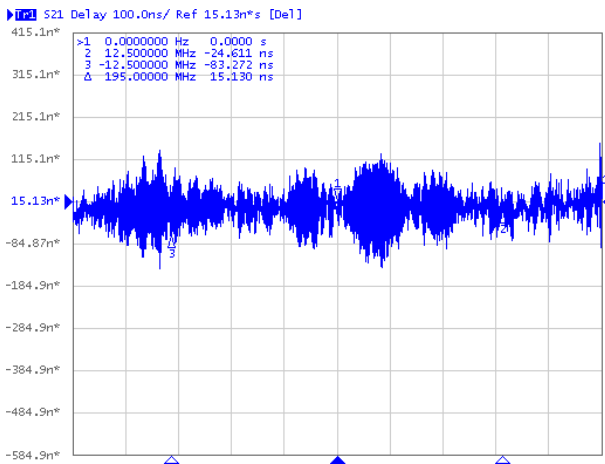
Passband Response



Horizontal: 5MHz/Div

Vertical: 0.5dB/Div

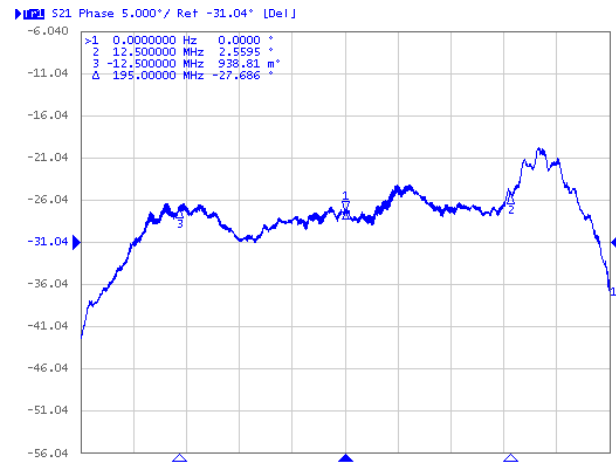
Group Delay Variation(f0±12.5MHz)



Horizontal: 4MHz/Div

Vertical: 100ns/Div

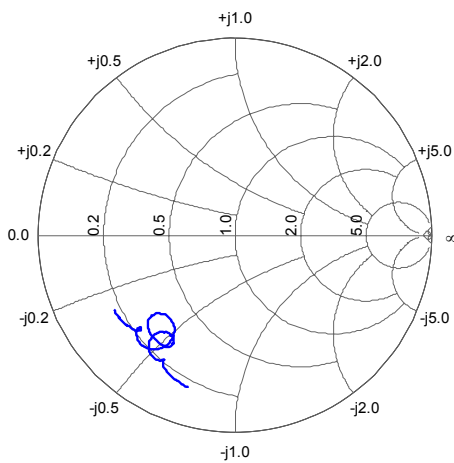
Phase Linearity(f0±12.5MHz)



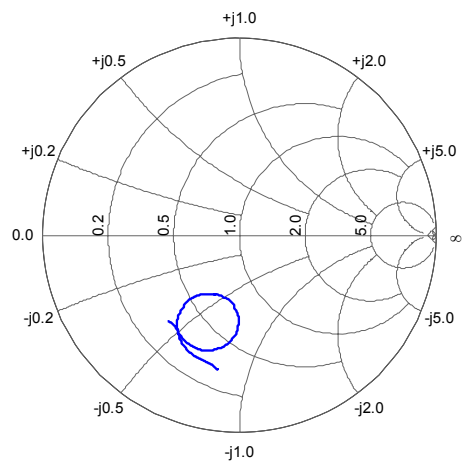
Horizontal: 4MHz/Div

Vertical: 5deg/Div

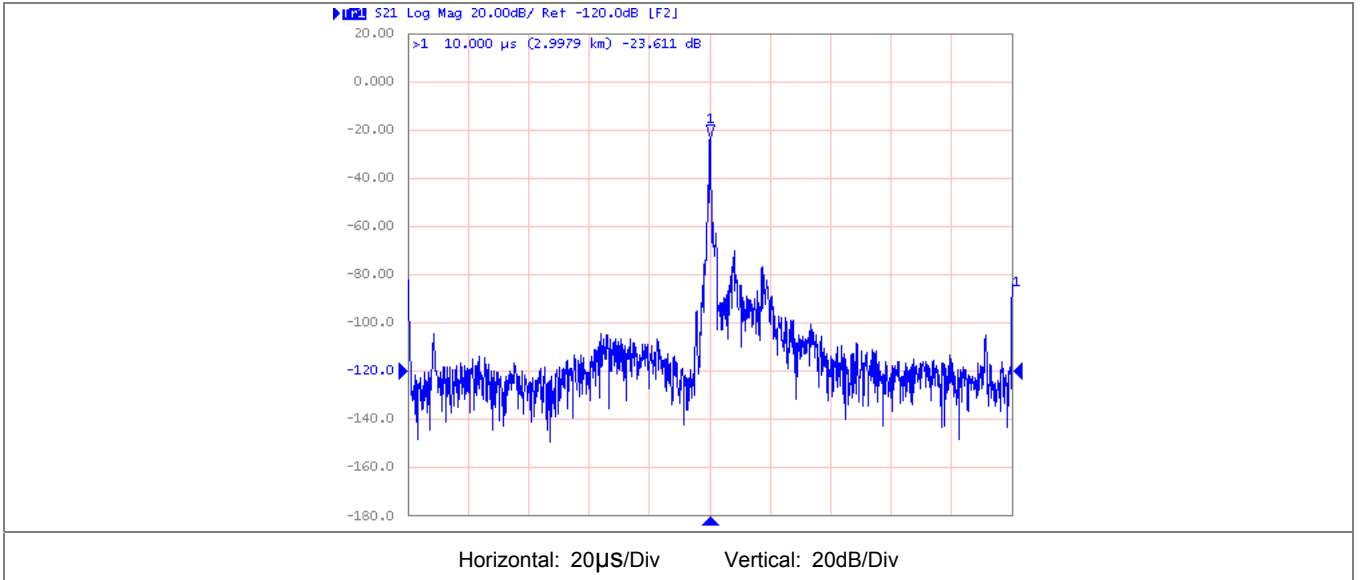
Smith Chart S11



Smith Chart S22



Time Domain



Marking

AMT
AD1952530



QMS : ISO9001



EMS : ISO14001

AMT Co., Ltd

phone +82-2-2062-1074 fax +82-2-2062-1081

www.amsaw.com / amt@amsaw.com