



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

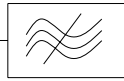
Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	193.5	195	196.5
Insertion Loss	dB	-	20	26
3 dB Bandwidth	MHz	25	29.21	-
30 dB Bandwidth	MHz	-	43.25	45
Passband Variation($f_0 \pm 12.5\text{MHz}$)	dB	-	0.7	1.5
Group Delay Variation($f_0 \pm 12.5\text{MHz}$)	nsec	-	260	300
Absolute Delay	usec	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

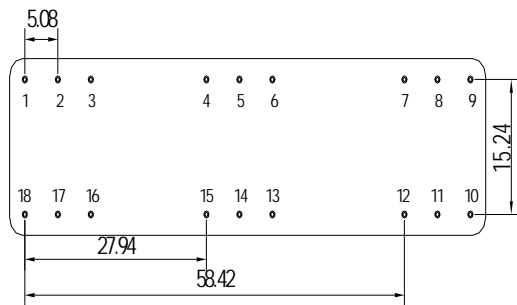
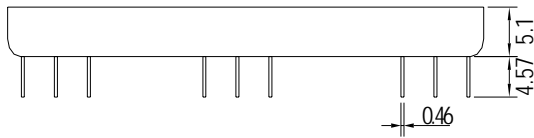
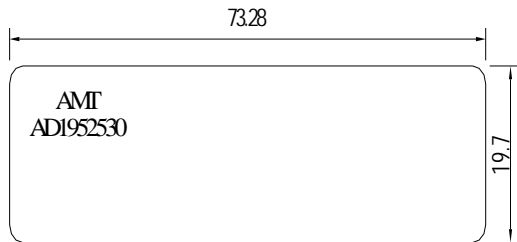


OUTPUT
50 Ω

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

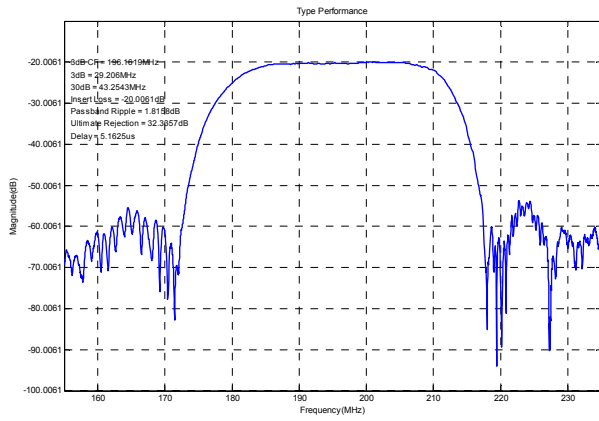
2) AD1952530 : Part Number

Package: DIP7320

Unit: mm

Typical Performance

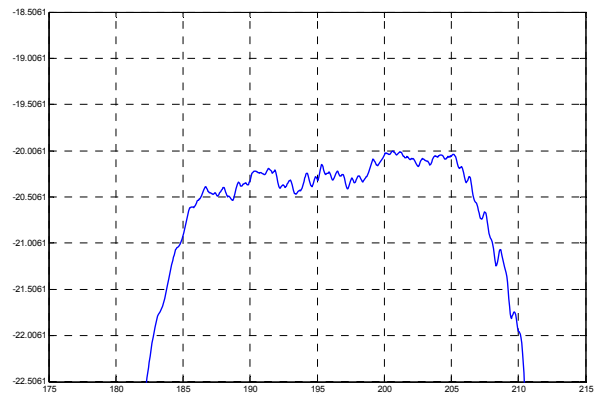
Frequency Response



Horizontal: 10MHz/Div

Vertical: 10dB/Div

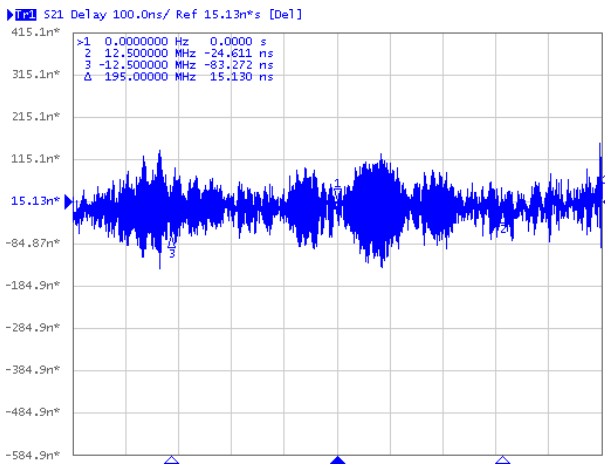
Passband Response



Horizontal: 5MHz/Div

Vertical: 0.5dB/Div

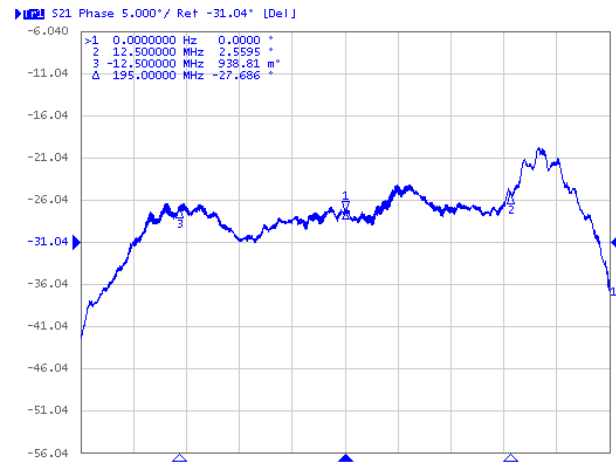
Group Delay Variation(f0±12.5MHz)



Horizontal: 4MHz/Div

Vertical: 100ns/Div

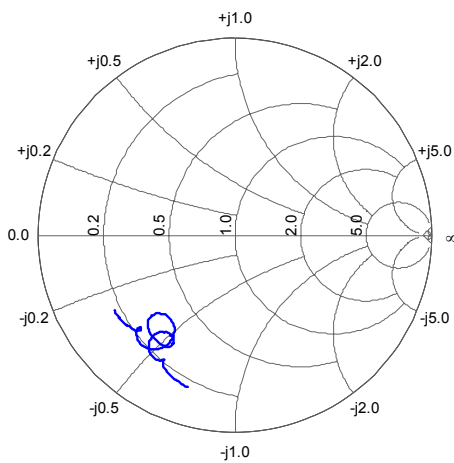
Phase Linearity(f0±12.5MHz)



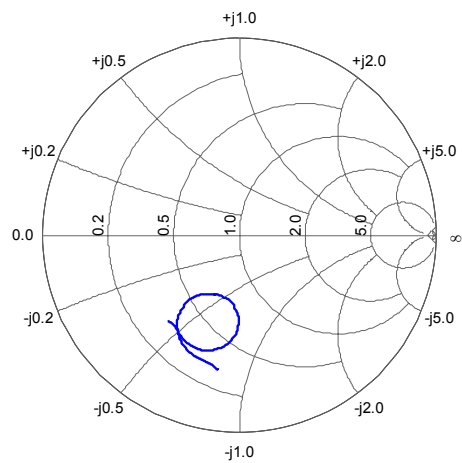
Horizontal: 4MHz/Div

Vertical: 5deg/Div

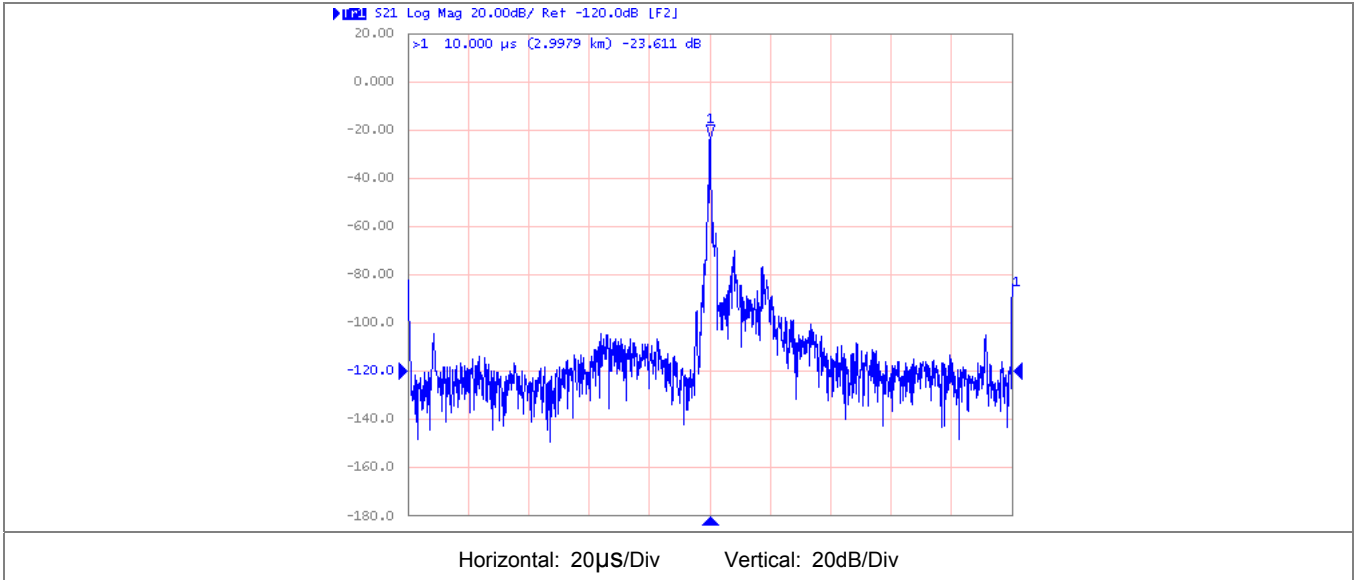
Smith Chart S11



Smith Chart S22



Time Domain



Marking

AMT
AD1952530



QMS : ISO9001



EMS : ISO14001

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