Active Duplexer
Datasheet

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Submitted to:
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I. Specifications for Inputs and Outputs

Figure 1 shows some of the different signal paths that will be referred to below in the Design Goal Specifications.

Design Goal Specifications:

- Bandwidth: 1850MHz to 1990MHz
- Isolation (S31 crosstalk) > 20dB attenuation
- Forward Transmission Coefficient (S21) < 2dB attenuation
- Forward Transmission Coefficient (S32) > 7.5dB
- Reflection Coefficient at Port 1 (S11) < -12dB
- Reflection Coefficient at Port 2 (S22) < -20dB

Features:

- Bidirectional Amplifier
- Unipolar (One source) power supply
- Metal Enclosure with SMA connectors
- Bias-T network is incorporated onto the circuit board
- Only 14mW of power consumption

II. Description of User Interface

There is no user interface for this project.

III. Verification

All described Design Specification Goals may be verified by using a network analyzer to measure the desired signal.