

## Features

- Low Insertion Loss: <0.5 dB @ 900 MHz
- Low Power Consumption: <1.0  $\mu$ A @ 3 VDC
- Very High Intercept Point: 52 dBm IP3
- Both Positive and Negative 3 to 8 V Control
- Low Cost SOT-26 Package

## Description

The SW-395 is a GaAs single pole, double throw switch in a low cost SOT-26 surface mount plastic package. The SW-395 is ideally suited for applications where very low power consumption, low intermodulation products, very small size and low cost are required.

Typical application is an internal / external antenna select switch for portable telephones and data radios. In addition, because of its low loss, good isolation and inherent speed, the SW-395 can be used as a conventional T/R switch or as an antenna diversity switch. The SW-395 can be used in power applications up to 0.5 Watts in systems such as cellular, PCS, GSM and other analog / digital wireless communications systems.

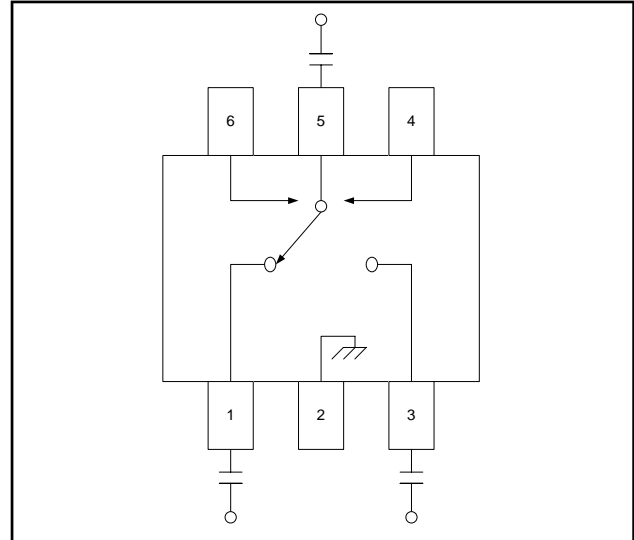
The SW-395 is fabricated using a mature 0.5-micron gate length GaAs pHEMT process. The process features full chip passivation for increased performance and reliability.

## Ordering Information <sup>1</sup>

Part Number	Package
SW-395	Bulk Packaging
SW-395TR-3000	3000 piece reel

1. Reference Application Note M513 for reel size information.

## Functional Schematic <sup>2</sup>



2. DC blocking capacitors are not required if negative control voltage is used.

## Pin Configuration

Pin No.	Function	Pin No.	Function
1	RF1	4	Control B
2	Ground	5	RF Common
3	RF2	6	Control A

## Absolute Maximum Ratings <sup>3,4</sup>

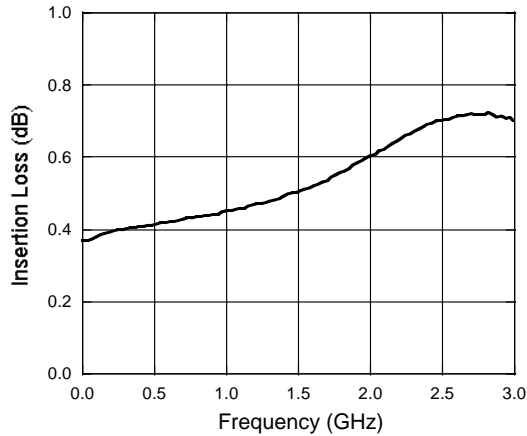
Parameter	Absolute Maximum
Input Power	+33 dBm
Operating Voltage	+8.5 Volts
Storage Temperature	-65°C to +150°C
Operating Temperature	-40°C to +85°C

3. Exceeding any one or combination of these limits may cause permanent damage to this device.
4. M/A-COM Technology does not recommend sustained operation near these survivability limits.

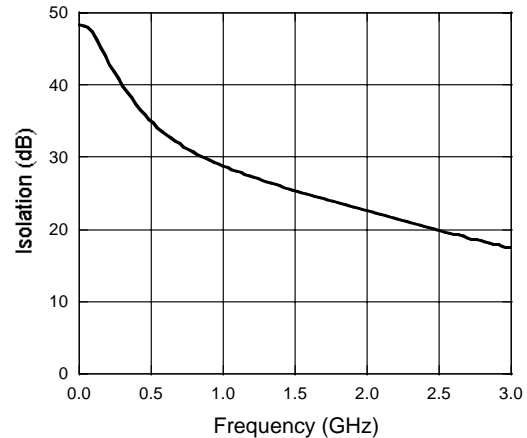


## Typical Performance Curves

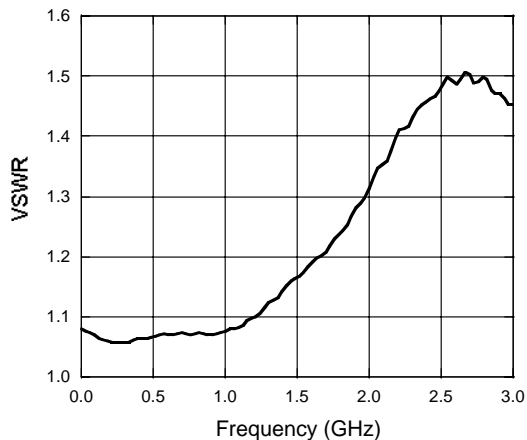
### Insertion Loss



### Isolation



### VSWR



## Handling Procedures

Please observe the following precautions to avoid damage:

## Static Sensitivity

Gallium Arsenide Integrated Circuits are sensitive to electrostatic discharge (ESD) and can be damaged by static electricity. Proper ESD control techniques should be used when handling these devices.