

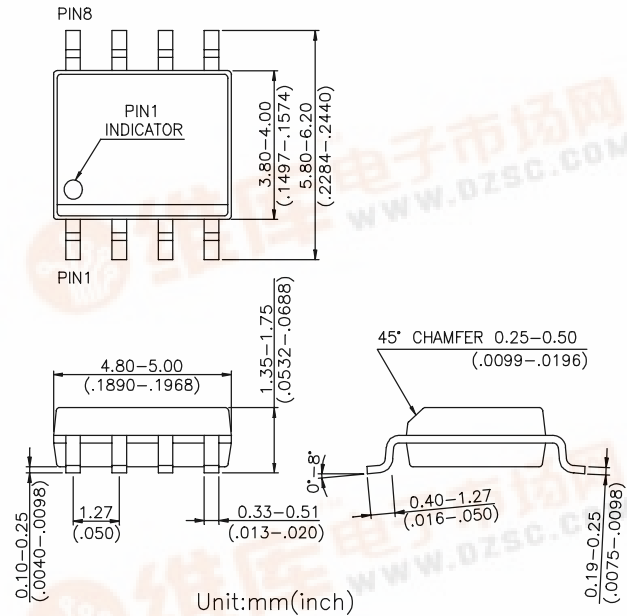
Features

- Frequency Range: DC - 2.0 GHz
- Reflective Type
- Low Power Consumption
- High Power Handling Capability
- Positive or Negative Control Voltage
- Low Cost Surface Mount SO-8 Package

Description

The HWS 2152 is an integrated GaAs SPDT Switch designed for transceivers operating in 1MHz to 2500 MHz frequency range. It is suitable for 900 MHz cellular phones, CT1, CT2, DECT, and Wireless LAN applications.

SOP-8



Electrical Specifications at 25°C with 0/+5V Control Voltages

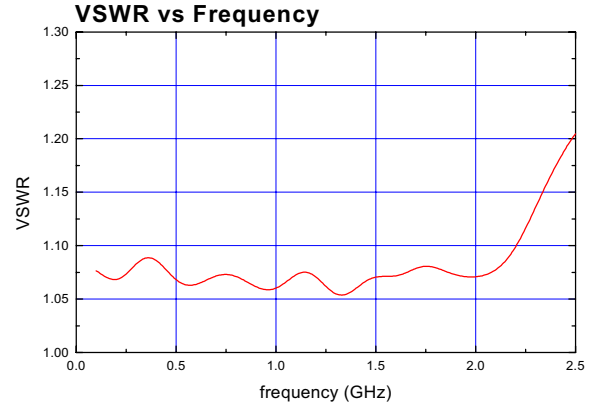
| Parameter | Test Conditions | Min. | Typ. | Max. | Unit |
|------------------------------------|-----------------|------|--------|--------|------|
| Insertion Loss | DC-1.0GHz | | 0.6 | 0.8 | dB |
| | DC-2.0GHz | | 0.8 | 1.0 | |
| Isolation | DC-1.0GHz | 25 | 27 | | dB |
| | DC-2.0GHz | 24 | 26 | | |
| VSWR | DC-1.0GHz | | 1.25:1 | 1.30:1 | |
| | DC-2.0GHz | | 1.35:1 | 1.40:1 | |
| Input Power for one dB Compression | >100 MHz | 25 | 27 | | dBm |

Note: All measurements made in a 50Ω system with 0/+5V control voltages, unless otherwise specified.

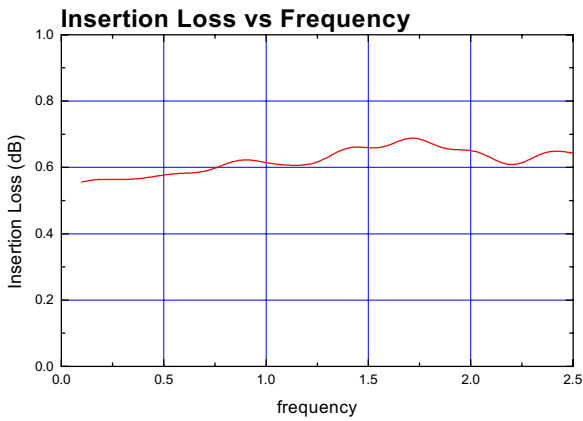


Absolute Maximum Ratings

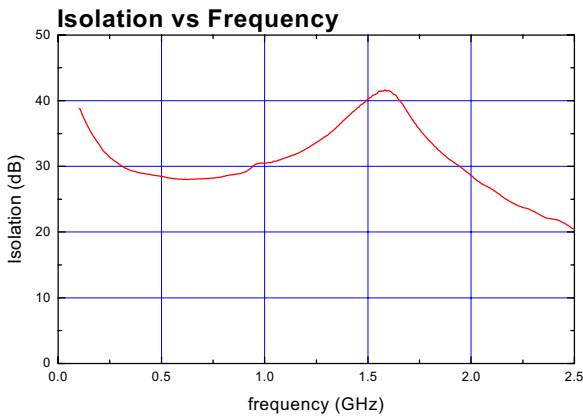
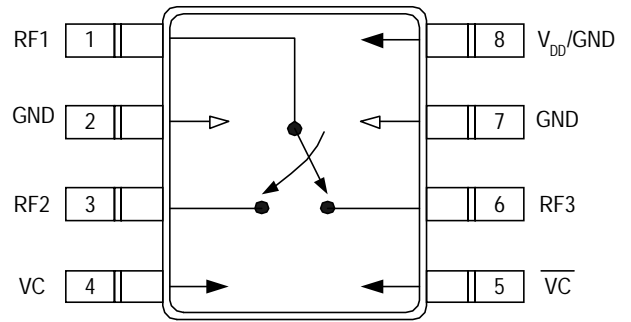
| Parameter | Absolute Maximum |
|---------------------------|------------------|
| RF Input Power >100MHz | 33dBm |
| Control Voltage | +8V |
| Operating Temperature | -40°C to +85°C |
| Storage Temperature | -65°C to +150°C |



Typical Performance



Pin Out



Truth Table

| VC | \overline{VC} | RF1-RF2 | RF1-RF3 |
|----|-----------------|----------------|----------------|
| 1 | 0 | Isolation | Insertion Loss |
| 0 | 1 | Insertion Loss | Isolation |

'0' = 0 to -0.2V
'1' = +5V to +8V.