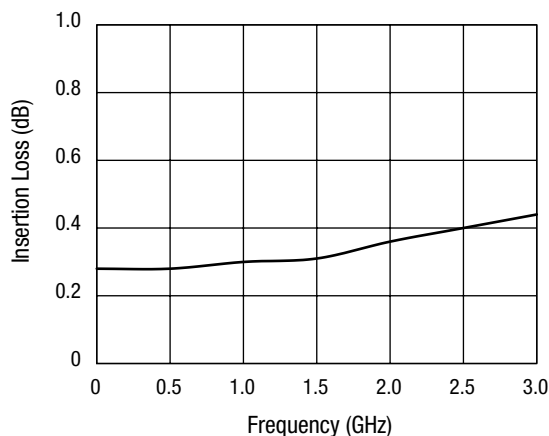
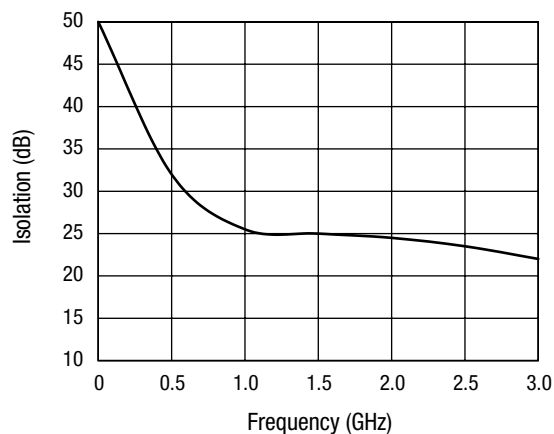
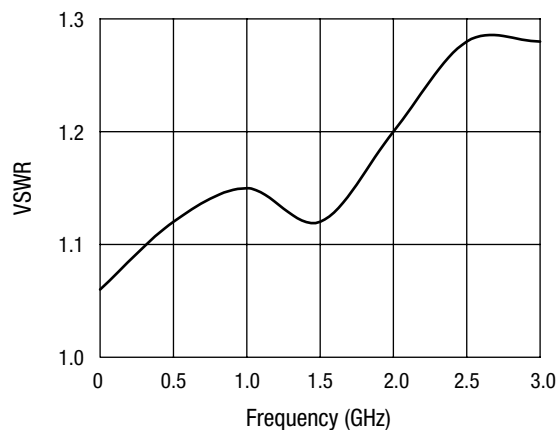


**Operating Characteristics at 25 °C (0, 3 V)** **$Z_0 = 50\ \Omega$ ,  $V_{CTL} = 0/3\text{ V}$  unless otherwise noted**

Parameter	Condition	Frequency	Min.	Typ.	Max.	Unit
Switching characteristics						
Rise, fall time	10/90% or 90/10% RF			25		ns
On, off time	50% CTL to 90/10% RF			35		ns
Video feedthru	$T_{RISE} = 1\text{ ns}$ , BW = 500 MHz			10		mV
Input power for 1 dB compression	$V_{CTL} = 0/3\text{ V}$ $V_{CTL} = 0/5\text{ V}$	0.5–2.5 GHz 0.5–2.5 GHz		30 34		dBm dBm
Intermodulation intercept point (IP3)	For two-tone input power 5 dBm $V_{CTL} = 0/3\text{ V}$ $V_{CTL} = 0/5\text{ V}$	0.5–2.5 GHz 0.5–2.5 GHz		43 50		dBm dBm
Thermal resistance				25		°C/W
ESD rating	Human body model (Class 1A)					
Control voltages	$V_{LOW} = 0\text{ to }0.2\text{ V @ }20\ \mu\text{A max.}$ $V_{HIGH} = 3\text{ V @ }100\ \mu\text{A max. to }5\text{ V @ }200\ \mu\text{A max.}$					

**Typical Performance Data (0, 3 V)****Insertion Loss vs. Frequency****Isolation vs. Frequency****VSWR vs. Frequency**

## Truth Table

$V_1$	$V_2$	$J_1-J_2$	$J_1-J_3$
$V_{HIGH}$	$V_{LOW}$	Isolation	Insertion loss
$V_{LOW}$	$V_{HIGH}$	Insertion loss	Isolation

All other conditions not recommended.  
 $3\text{ V} \leq V_{HIGH} \leq 5\text{ V}$ ,  $0\text{ V} \leq V_{LOW} \leq 0.2\text{ V}$ .

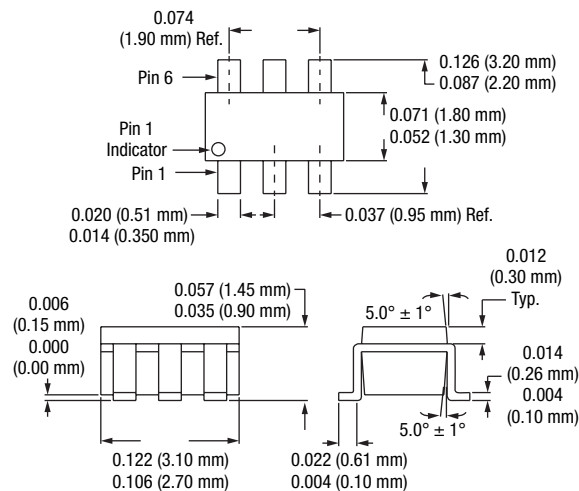
## Recommended Solder Reflow Profiles

Refer to the [“Recommended Solder Reflow Profile”](#) Application Note.

## Tape and Reel Information

Refer to the [“Discrete Devices and IC Switch/Attenuators Tape and Reel Package Orientation”](#) Application Note.

## SOT-6



## Absolute Maximum Ratings

Characteristic	Value
RF input power	6 W > 500 MHz 0/7 V control
Control voltage	-0.2 V, +8 V
Operating temperature	-40 °C to +85 °C
Storage temperature	-65 °C to +150 °C

Performance is guaranteed only under the conditions listed in the specifications table and is not guaranteed under the full range(s) described by the Absolute Maximum specifications. Exceeding any of the absolute maximum/minimum specifications may result in permanent damage to the device and will void the warranty.

**CAUTION:** Although this device is designed to be as robust as possible, ESD (Electrostatic Discharge) can damage this device. This device must be protected at all times from ESD. Static charges may easily produce potentials of several kilovolts on the human body or equipment, which can discharge without detection. Industry-standard ESD precautions must be employed at all times.

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