



### Main Features:

- Frequency Range: 0.1 to 20 GHz.
- Typical values: I.L: 0,5 dB, Isolation 30 dB
- RF connectors (I/O): SMA
- Solder filtered pins for DC connection
- Solid State reflective switch
- Gold plated compact aluminum housing
- Hi-reliability and dedicated screening/ environmental tests available under request

### ERZ-SW2-0010-2000-3

The ERZ-SW2-0010-2000-3 is a wideband SPDT switch with low insertion losses and high isolation. The compact size and modularity makes it ideal for a wide range of applications.

### Typical applications:

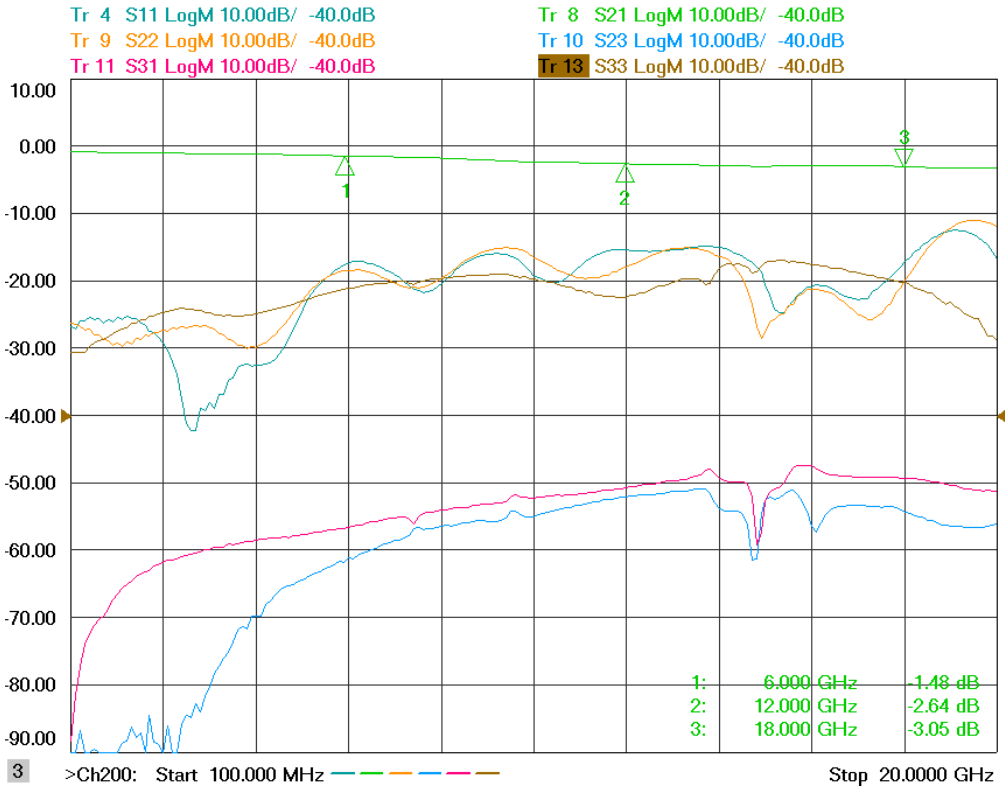
- Industrial / Laboratory
- Satcom / Telecom
- Space / Aerospace / Military

### Performance

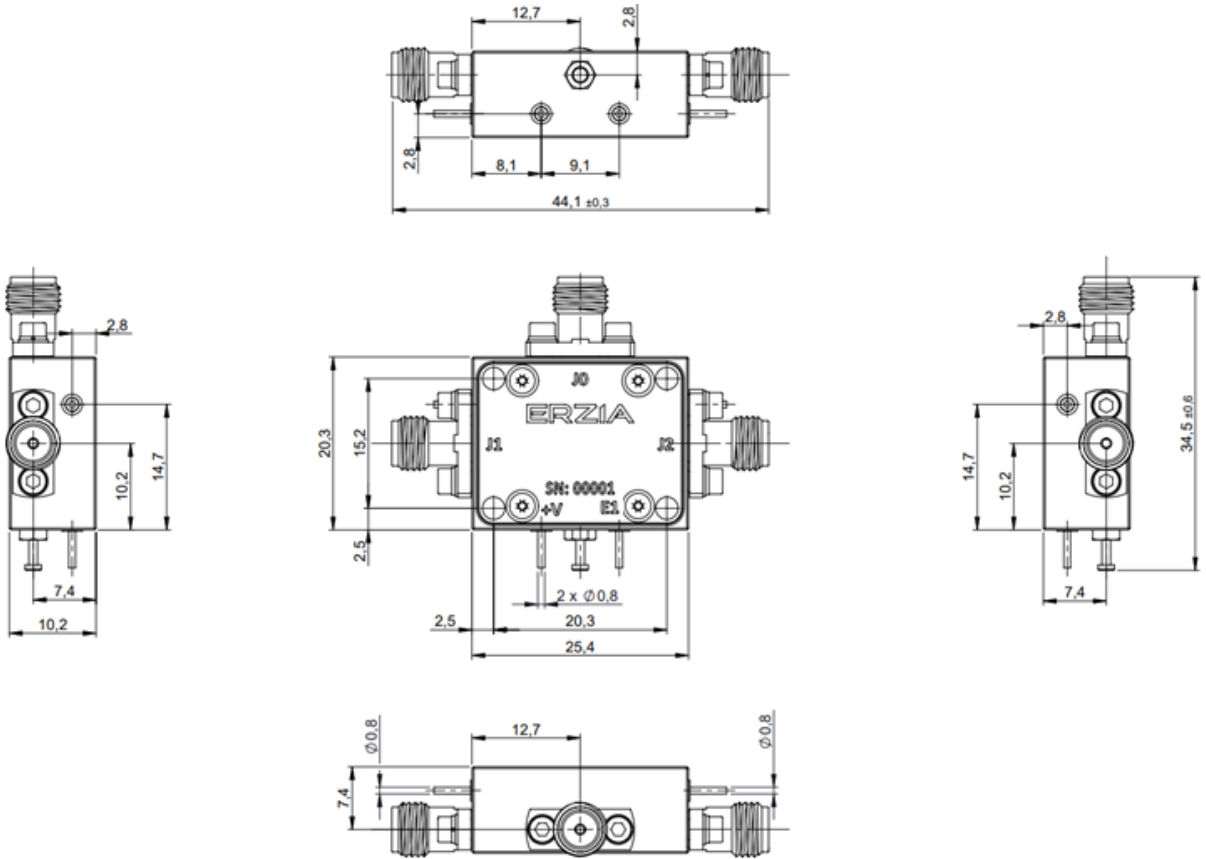
Parameter	Value			Units
	Min	Typ	Max	
Frequency	0.1	-	20	GHz
Insertion Loss	-	2.5	3.5	dB
Isolation	-	50	40	dB
Switching Time	-	40	-	ns
Input P1dB	-	27	-	dBm
VSWR input	-	1.5:1	2.0:1	-
VSWR output	-	1.5:1	2.0:1	-
DC Voltage	8	12	15	VDC
Control Voltage (TTL)	0	-	5	VDC
RF Connectors	SMA Female IN/OUT			-

Specifications at a case temperature of 25°C unless otherwise indicated

### S-Parameters and Isolation



### Mechanics and Control Table



Control Input	Signal State
E1	COMMON to X
Low	PATH 1 OFF
High	PATH 2 ON

### Absolute Maximum Ratings

Condition	Value
DC Voltage	15 V
Maximum Input Power (CW)	24 dBm
Operation temperature (at case)	-45 to 85 °C
Hot Switching	20 dBm max

- Stress above these ratings may cause permanent damage to the device.
- It is final user responsibility to maintain the amplifier within the specified ranges.

### Environmental Specifications (By Design)

Operating Temperature:	-45 to +85 °C	(MIL-STD-810F, method 520.2)
Storage Temperature:	-55 to 125 °C	(MIL-STD-810F, method 520.2)
Vibration:	8g rms	(MIL-STD-810F, method 514.5)
Shock:	20g,11ms,saw-tooth	(MIL-STD-810F, method 516.5)
Acceleration:	15g	(MIL-STD-810F, method 513.5)

### RoHS & REACH Compliance

This part is compliant with EU 2011/65/UE RoHS (Restrictions on the Use of Certain Hazardous Substances in Electrical and Electronic Equipment) and REACH (Registration, Evaluation, Authorization and restriction of Chemical substances) directives.



### Documentation and Test Reports

All modules are at least delivered with: Electrical Test Report, Certificate of Conformance, Certificate of Acceptance and Origin. Optionally, units can be environmentally tested (temperature, vibration...).

### Option (HS): Heat Sink

A heat sink (HS) can be provided to allow the operation of Power Amplifiers. Please note that most power amplifiers need heat sink or appropriate heat dissipation strategy.

### Space / Military Usage

Most of ERZIA's products are based on rad-hard technologies and can be manufactured and integrated according to MIL / ECSS or specific hi-rel standard-screening for space, aeronautics, military or specific hi-reliability usage.

### Customization and Extended Performances

ERZIA can fully design or adapt one of the existing RF amplifiers designs according to your specifications. Please contact us for additional information.

# ERZIA

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Tel: +34 942 29 13 42

[sales@erzia.com](mailto:sales@erzia.com)

[www.erzia.com](http://www.erzia.com)