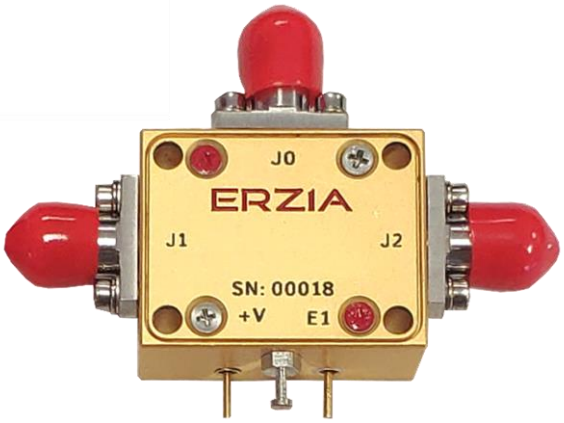
ERZIA

DATASHEET

SP2T Switch

ERZ-SW2-0010-0300-0.5



Main Features:

- Frequency Range: 0.1 to 3 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 platted compact aluminum housing
- Hi-reliability and dedicated screening/ environmental tests available under request

ERZ-SW2-0010-0300-0.5

The ERZ-SW2-0010-0300-0.5 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:

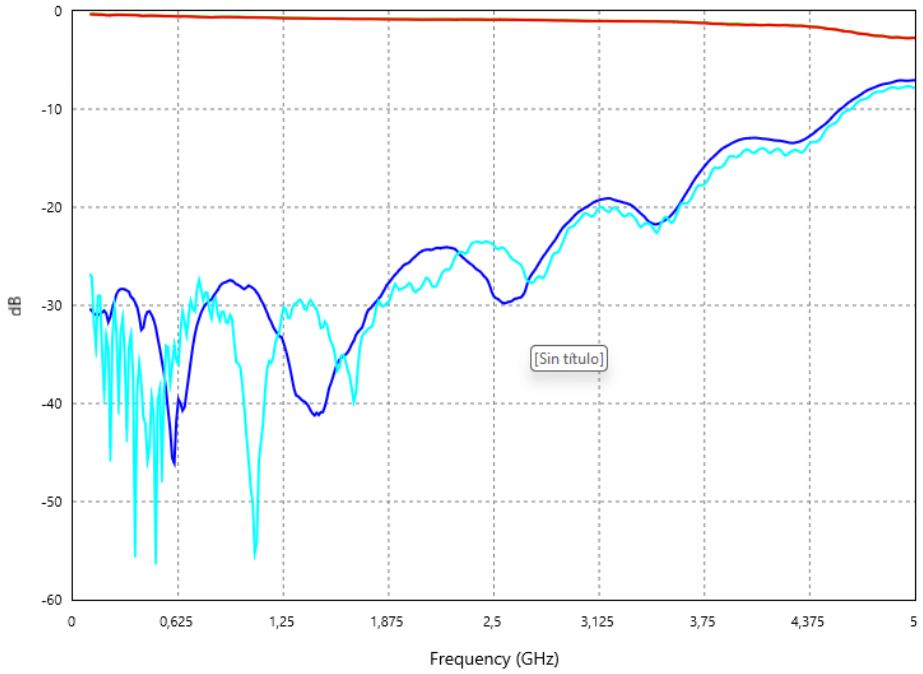
- Industrial / Laboratory
- Satcom / Telecom
- Space / Aerospace

Performance

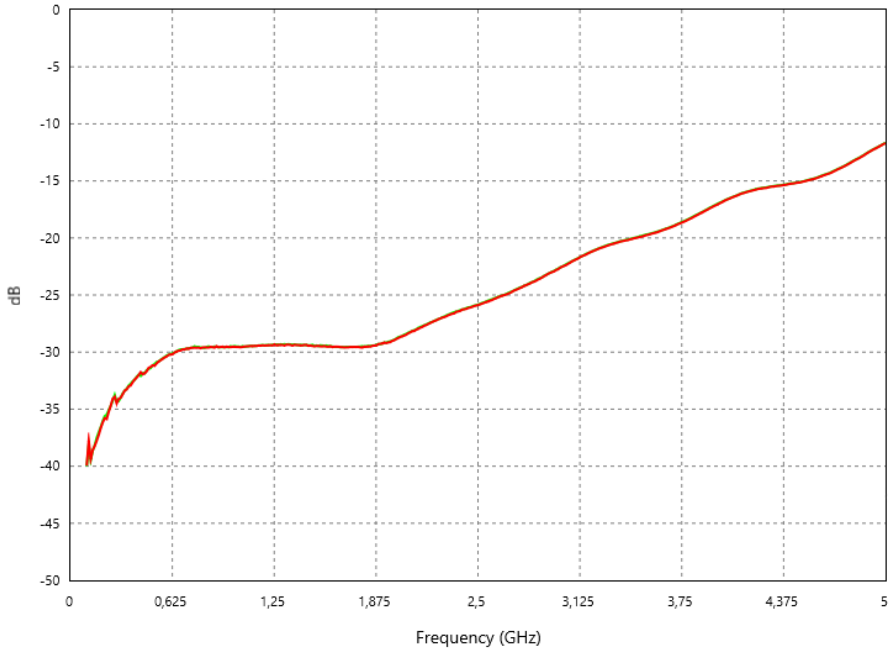
Parameter	Value			Units
	Min	Typ	Max	
Frequency	0.1	-	3	GHz
Insertion Loss	-	0,5	1	dB
Isolation	20	30	-	dB
Switching Time	-	15	-	ns
Input P1dB	23	30	-	dBm
VSWR input	-	1.5:1	2.2:1	-
VSWR output	-	1.5:1	2.2:1	-
DC Voltage	8	12	15	VDC
Control Voltage (TTL)	0	-	5	VDC
RF Connectors	SMA Female IN/OUT			-

Specifications at a case temperature of 25ºC unless otherwise indicated

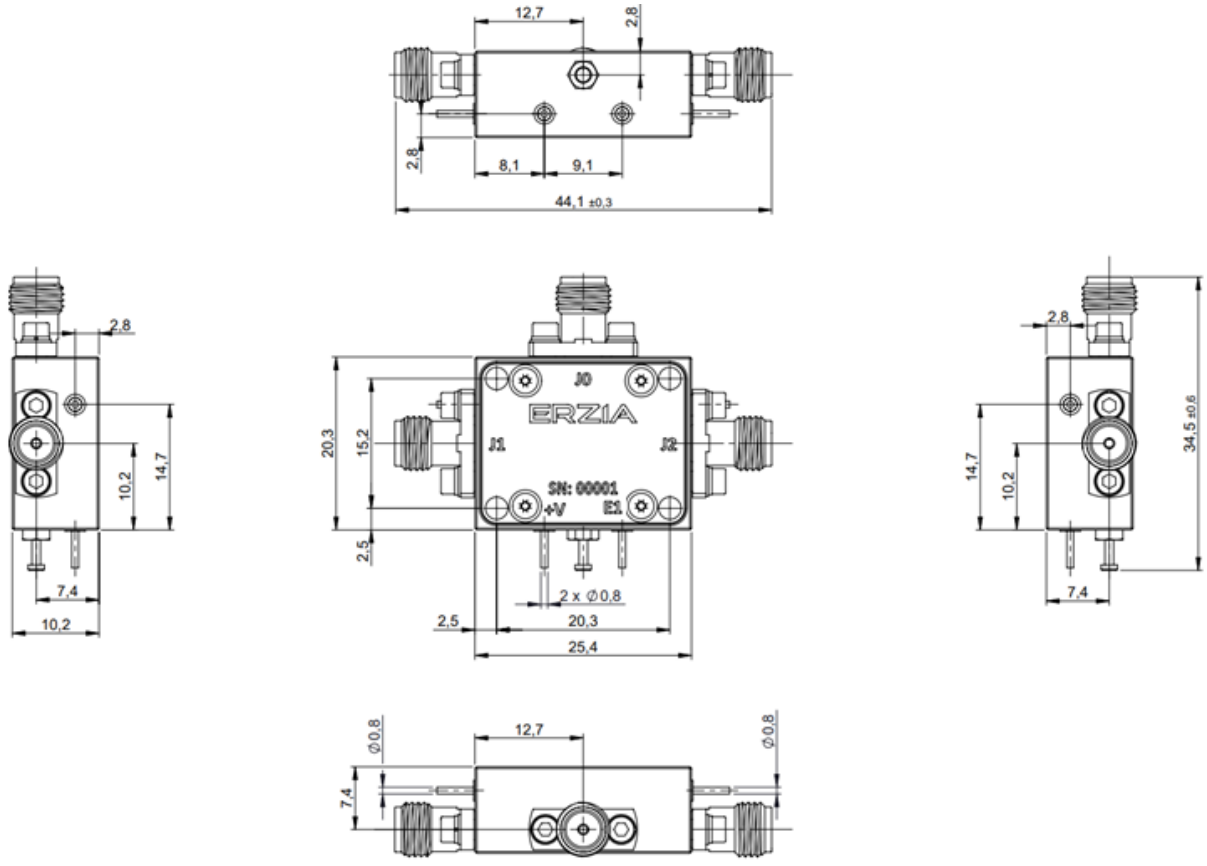
S-Parameters: S21 (red), S11 (light blue) , S22 (blue)



Isolation between not connected ports



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)	30 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 / Hi-Rel 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, 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.

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