



Main Features:

- Frequency Range: 2 to 10 GHz.
- Typical values: I.L: 1.5 dB, Isolation 80 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-SW1-0200-1000-2.5

The ERZ-SW1-0200-1000-2.5 is a wideband SPST switch with low insertion loss and high isolation. The compact size and modularity makes it ideal for a wide range of applications.

Typical applications:

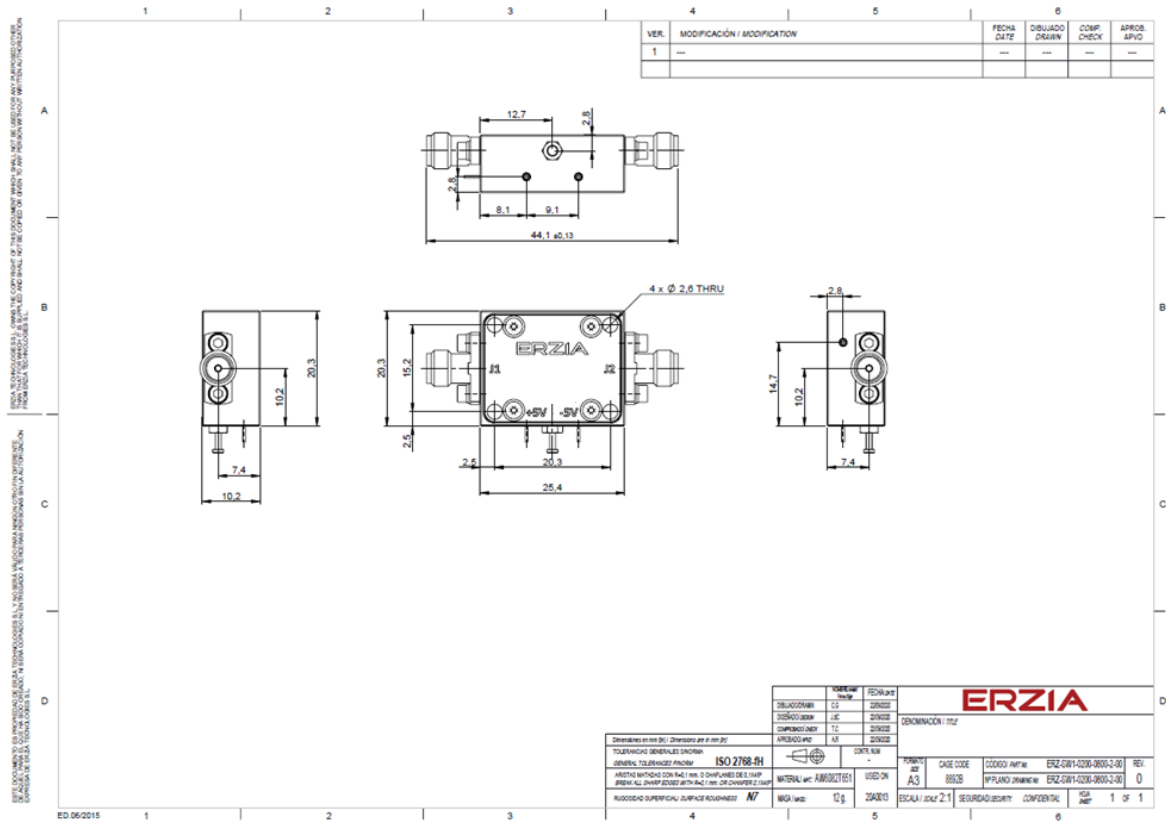
- Industrial / Laboratory
- Satcom / Telecom
- Space / Aerospace / Military

Performance

Parameter	Value			Units
	Min	Typ	Max	
Frequency	2	-	10	GHz
Insertion Loss	-	1.5	2	dB
Isolation	70	80	-	dB
Switching Time	-	25	-	ns
VSWR input	-	1.3:1	1.5:1	-
VSWR output	-	1.3:1	1.5:1	-
Positive Power Supply	-	5 (30mA)	-	VDC
Negative Power Supply	-	-5 (15 mA)	-	VDC
RF Connectors	SMA Female IN/OUT			-

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

Mechanics and Interfaces



Parameter	Value
Size	25.4x20.3x10.16 mm
Weight	15g
RF Input Connector (J1)	SMA Female
RF Output Connector (J2)	SMA Female
DC Connectors (+5V / -5 V)	Solder Pin
GND Connector	Solder Pin
Control	Solder Pin TTL driver, inverting logic: Logic 0: Isolation Logic 1: Insertion loss

Absolute Maximum Ratings

Condition	Value
DC Voltage	-15 V / +5.5 V
Maximum Input Power (CW)	+23 dBm
Operation temperature (at case)	-45 to 85 °C
Storage temperature	-55 to 125 °C

- 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.

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