



Main Features:

- Frequency Range: 0.01 to 38 GHz.
- Typical values: I.L: 2 dB, Isolation 35 dB
- RF connectors (I/O): 2.92 mm Female
- 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-SW1-0001-2000-1.5

The ERZ-SW1-0001-2000-1.5 is a wideband SPST 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	0.01	-	38	GHz
Insertion Loss	-	2	-	dB
Isolation	25	35	-	dB
Switching Time	-	50	-	ns
Input P1dB	-	20	-	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	2.92 mm Female IN/OUT			-

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

Absolute Maximum Ratings

Condition	Value
DC Voltage	15 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)

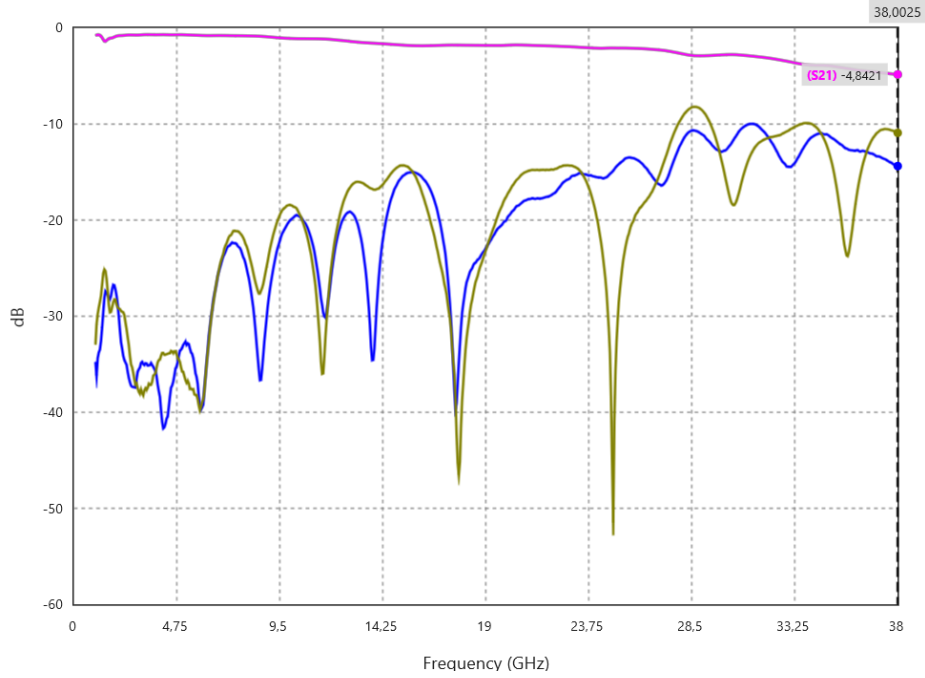
Operating Temperature:	-45 to +85 °C	(MIL-STD-810F, method 520.2)
Storage Temperature:	-55 to 125 °C	(MIL-STD-810F, method 520.2)
Vibration:	8g rms	(MIL-STD-810F, method 514.5)
Shock:	20g,11ms,saw-tooth	(MIL-STD-810F, method 516.5)
Acceleration:	15g	(MIL-STD-810F, method 513.5)

RoHS & REACH Compliance

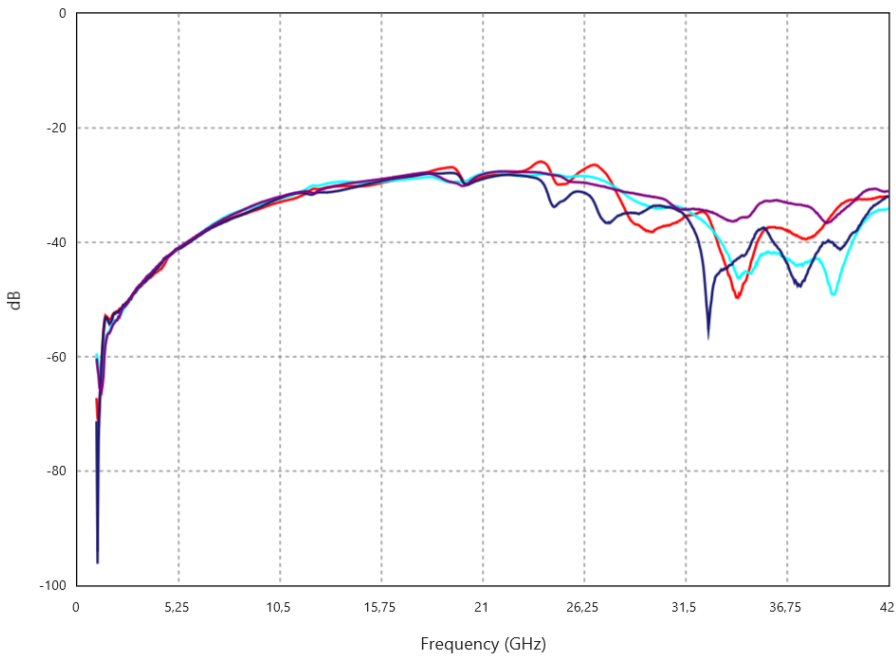
This part is compliant with EU 2011/65/UE RoHS (Restrictions on the Use of Certain Hazardous Substances in Electrical and Electronic Equipment) and REACH (Registration, Evaluation, Authorization and restriction of Chemical substances) directives.



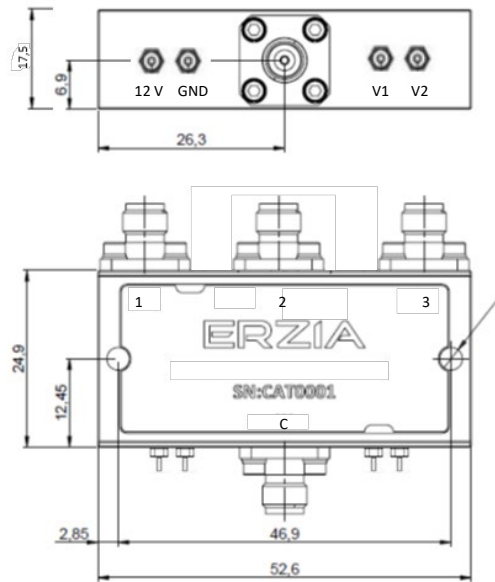
S-Parameters: S21 (pink), S11 (grey), S22 (blue)



Isolation between not connected ports



Mechanics and Control Table



Control Input		Signal State
V1	V2	COMMON to X
Low	Low	All OFF
Low	High	PATH 1 ON
High	Low	PATH 2 ON
High	High	PATH 3 ON

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

20230922_rev1.0

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