

ERZ-SW2-0200-1000-2.5



ERZ-SW2-0200-1000-2.5

The ERZ-SW2-0200-1000-2.5 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.

Main Features:

- Frequency Range: 2 to 10 GHz.
- Typical values: I.L: 2 dB, Isolation 80 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

Typical applications:

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

Performance

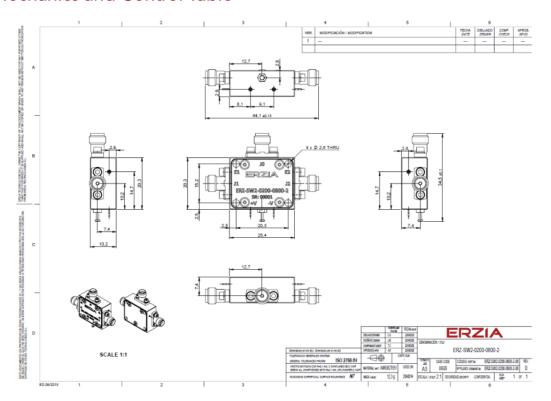
Parameter	Value			Units
	Min	Тур	Max	
Frequency	2	-	10	GHz
Insertion Loss	-	1.5	2	dB
Isolation	70	80	-	dB
Switching Time	-	25	-	ns
VSWR input	-	1.3:1	1.5:1	-
VSWR output	-	1.3:1	1.5:1	-
DC Voltage	-12	-	5	VDC
Control Voltage (TTL)	0	-	5	VDC
RF Connectors	SMA Female IN/OUT			-

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



ERZ-SW2-0200-1000-2.5

Mechanics and Control Table



Connector	Signal	Details	
E1, E2	Control	Non-Inverting Logic 0 (low) (0 to 0.8V): Insertion loss Logic 1 (high) (2.4 to 4.7V): Isolation Inverting Logic 0 (low) (0 to 0.8V): Isolation Logic 1 (high) (2.4 to 4.7V): Insertion loss Non-Inverting Control Input E1: Low E2: High -> Signal Path J0 - J1 E1: High E2: Low -> Signal Path J0 - J2	
J0	RF input	SMA Female	
J1	RF input/output	SMA Female	
J2	RF input/output	SMA Female	
+V	Positive power supply	5V	
-V	Negative power supply	-12V	
GND	Ground	Ground	



ERZ-SW2-0200-1000-2.5

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.







ERZ-SW2-0200-1000-2.5

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.



20240228_rev1.0

Copyright © 2024 ERZIA Technologies S.L. All rights reserved. This information is commercial and indicative, subject to change without notice