

RF Switch

SP8T, 20GHz

Overview

An absorptive SP8T, Solid State, TTL controlled, High Isolation RF Switch with:

- ✓ Bandwidth covering all bands between 0.1-20 GHz
- ✓ Low insertion loss (~5 dB typical) and excellent isolation (80 dB)
- ✓ Fast TTL-controlled switching, 120 ns typical.

Applications

- Automated Test Equipment (ATE)
- Radar and EW systems
- RF front-ends and multi-band transceivers
- Signal routing in laboratories & production lines
- 5G, Satcom, and broadband communication systems

Description

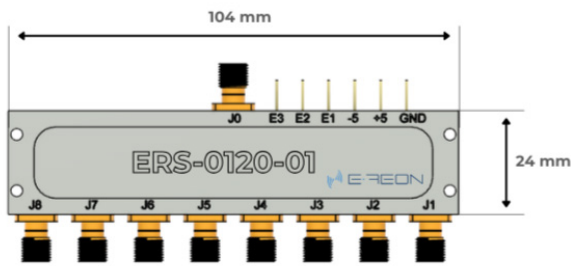
- The ERS is an absorptive SP8T switch optimized for broadband use up to 20 GHz. It combines high isolation, fast switching speed, and robust TTL control in a compact, nickel-plated package, making it an ideal choice for defense, tel-ecom, and test applications.

Product Features

- ✓ Frequency range: 0.1 – 20 GHz
- ✓ Insertion loss: 4.5 – 5.0 dB
- ✓ Isolation: 80 dB typical
- ✓ Switching speed: 120 ns
- ✓ Input power handling: 1 W
- ✓ Control: TTL (0–0.8 V / 2.8–5 V)
- ✓ Supply: +5 V @ 400 mA, –5 V @ 50 mA

Technical Data Specifications

Parameter	Value	Remarks	Note	Condition
Product Name	ERS-0120-010			
E-REON P.N.	TBD			
Dimensions	104x 24 x 10	[Lx W x H]mm		
Weight	80	gr		
Control Voltage	0–0.8 V / 2.8–5	V		
Supply Voltage	+5 / -5	V		400mA @+5V 50mA @-5V



Quick Guide

- Control via 3 TTL lines (E1, E2, E3)
- Truth table defines selected output (J1–J8)
- Designed for low power cold switching
- SMA female ports ensure easy integration
- Terminate correctly before applying power

Compliance

RoHS & REACH compliant

This product is fully compliant with RoHS and REACH directives, ensuring safe use and adherence to international environmental standards.

Operating Guidelines

Operates reliably across $-45\text{ }^{\circ}\text{C}$ to $+85\text{ }^{\circ}\text{C}$. Designed for low-power cold switching with TTL logic control.

About Us

E-REON B.V. is a Dutch technology driven enterprise. Since founding in 2015, our business focus on RF&Microwave Solutions. E-REON's team designs, develop and manufacture RF&Microwave products for commercial, defense and industrial systems.

Truth Table

E3	E2	E1	Selected Out.
0	0	0	J0 → J1
0	0	1	J0 → J2
0	1	0	J0 → J3
0	1	1	J0 → J4
1	0	0	J0 → J5
1	0	1	J0 → J6
1	1	0	J0 → J7
1	1	1	J0 → J8
TTL High = 2.8 to 5 V / TTL Low = 0 to 0.8 V			

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