ERZIA

DATASHEET

SP5T Switch

ERZ-SW5-0010-1800-3.5



Main Features:

- Frequency Range: 0.1 to 18 GHz.
- Typical values: I.L: 3 dB, Isolation 50 dB
- RF connectors (I/O): SMA Female
- Solder filtered pins for DC connection
- Solid State non-reflective switch
- Gold platted compact aluminum housing
- Hi-reliability and dedicated screening/ environmental tests available under request

ERZ-SW5-0010-1800-3.5

The ERZ-SW5-0010-1800-3.5 is a wideband SP5T 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	-	18	GHz
Insertion Loss	-	3	6	dB
Isolation	30	40-60	-	dB
Switching Time	-	70	-	ns
Input P 0.1dB	-	18	-	dBm
VSWR input	-	1.5:1	2.8:1	-
VSWR output	-	1.5:1	2.8:1	-
DC Voltage	8	12	15	VDC
Control Voltage (TTL)	0		5	VDC
RF Connectors	SMA Female IN/OUT			-

Specifications at a case temperature of 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.

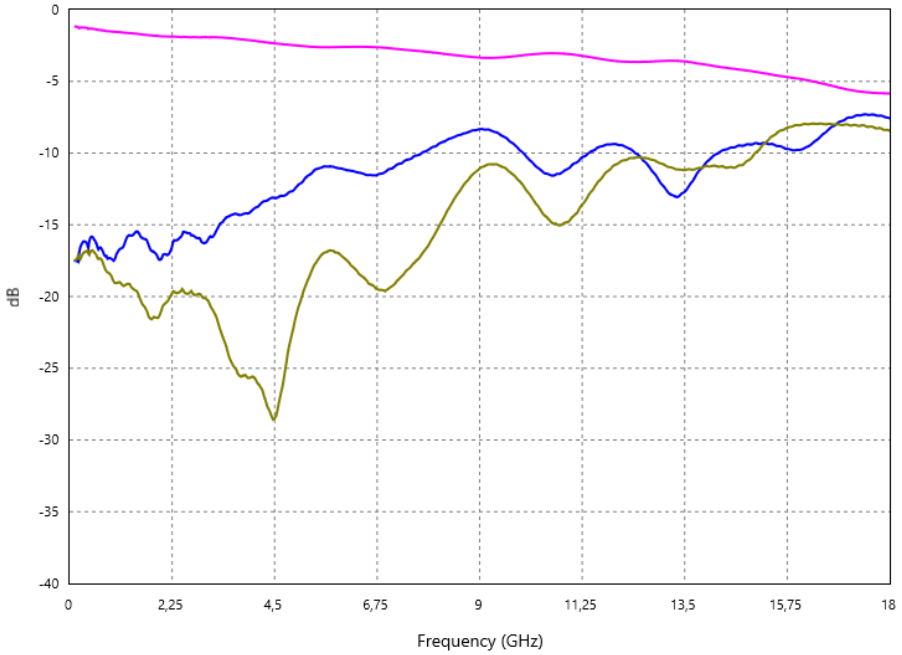
Environmental Specifications (By Design)

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)

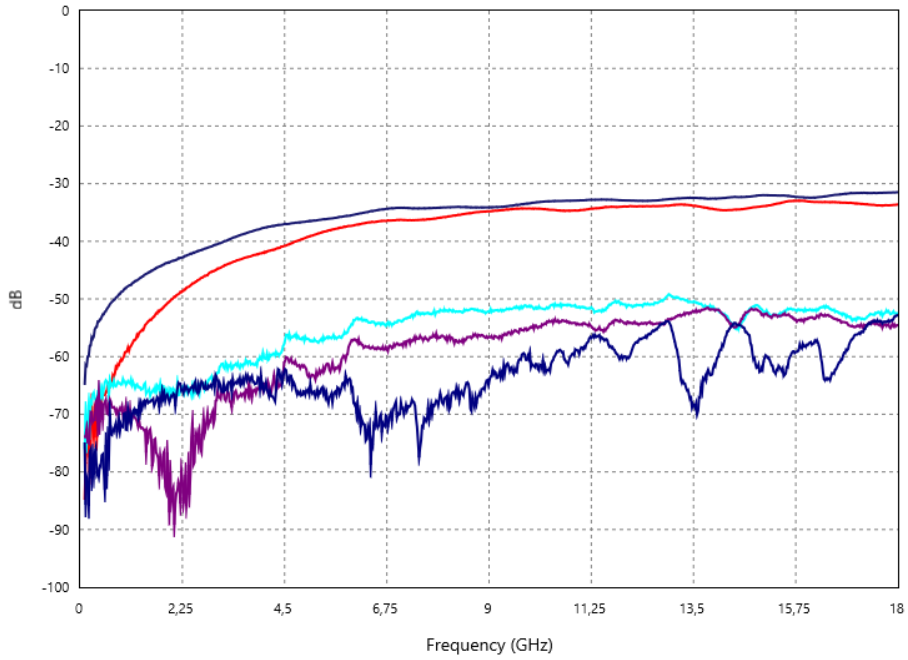
RoHS & REACH Compliance

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 (blue) , S22 (green)



Isolation between not connected ports



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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