TYPICAL CHARACTERISTICS

ON

P5T-218-80-T-25DBM-SFF

PMI MODEL NUMBER P5T-218-80-T-25DBM-SFF IS A SINGLE POLE, FIVE THROW ABSORPTIVE SWITCH DESIGNED TO OPERATE OVER THE 2 GHz TO 18 GHz FREQUENCY RANGE. THIS MODEL IS DESIGNED TO MAINTAIN LOW INSERTION LOSS, HIGH ISOLATION, FAST SWITCHING SPEED, AND 25 dBm POWER HANDLING.

Reported and Tested By: S. Lange

Date: 06/19/2025

7309-A Grove Road Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731
Email: sales@quanticpmi.com

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PRODUCT FEATURE

DESCRIPTION:

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SPECIFICATIONS:

- FREQUENCY RANGE:..... 2 TO 18 GHz
- INSERTION LOSS:..... 3.2 dB MAXIMUM
- ISOLATION:..... 80 dB MINIMUM
- VSWR:..... 2.0:1 MAXIMUM
- SPEED:..... 50 ns MAXIMUM
- CONTROL:..... TTL LOGIC
- POWER INPUT (OPERATING):..... 25 dBm MAXIMUM
  20 dBm MAXIMUM (HOT SWITCHING)
- POWER SUPPLY :..... +5V TO +15V @ 120mA NOMINAL
  -5V TO -15V @ 65mA NOMINAL
- RF CONNECTORS:..... SMA FEMALE
- DC CONNECTORS:..... SOLDER PINS
- FINISH:..... GOLD PLATED

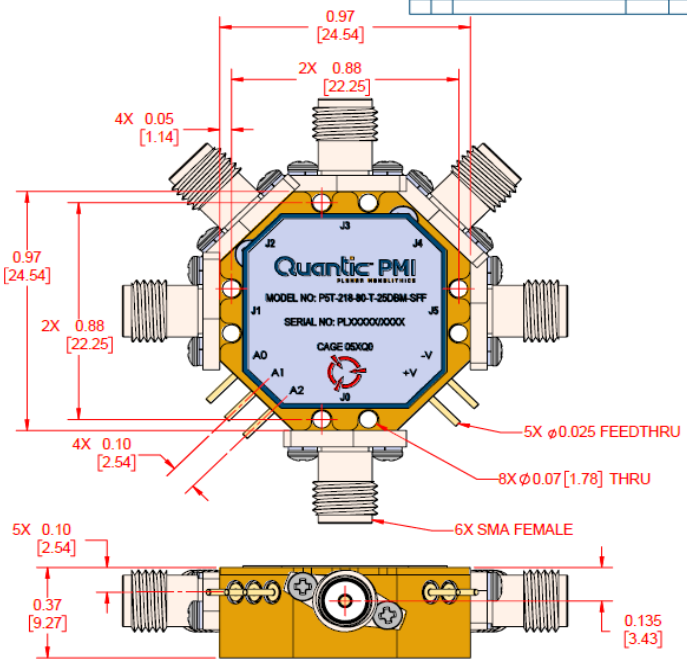
TTL LOGIC CONTROL TABLE							
A0	A1	A2	J0-J1	J0-J2	J0-J3	J0-J4	J0-J5
1	0	0	I.L.	ISO	ISO	ISO	ISO
0	1	0	ISO	I.L.	ISO	ISO	ISO
1	1	0	ISO	ISO	I.L.	ISO	ISO
0	0	1	ISO	ISO	ISO	I.L.	ISO
1	0	1	ISO	ISO	ISO	ISO	I.L.

ENVIRONMENTAL RATINGS:

- TEMPERATURE:..... -40°C TO +85°C (OPERATING)
  -55°C TO +125°C (STORAGE)
- HUMIDITY:..... MIL-STD-202, METHOD 103B COND. B
- SHOCK:..... MIL-STD-202, METHOD 213B COND. B
- VIBRATION:..... MIL-STD-202, METHOD 204D COND. B
- ALTITUDE:..... MIL-STD-202, METHOD 105C COND. B
- TEMPERATURE CYCLE:..... MIL-STD-202, METHOD 107D COND. A

NOTE: SPECIFICATIONS WILL VARY OVER TEMPERATURE
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	1/5/2026	



PMI CONFIDENTIAL AND PROPRIETARY

APPROVALS	DATE
DRAWN S LANGE	1/5/2026
ISSUED	

Quantic PMI
PLANAR MONOLITHICS
7309-A GROVE ROAD FREDERICK, MARYLAND 21704 USA
TEL: (301)662-5019 FAX: (301)662-1731
WEB: WWW.QUANTICPMI.COM
ISO 9001 CERTIFIED

TITLE: OUTLINE
P5T-218-80-T-25DBM-SFF

SIZE	FSCM NO.	DWG NO.	REV
B	05XQ0	27050420	A1

SCALE 3:1 SHEET 1 OF 1

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TEST DATA

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	TEST RESULTS		
			+25°C	-40°C	85°C
1	Frequency Range:	2 to 18 GHz	2 to 18 GHz		
2	Insertion Loss:	3.2 dB Max.	2.99 dB Max.	2.90 dB Max.	3.19 dB Max.
3	VSWR Input/Output	2.0:1 Max.	1.93 :1 Max.	1.98 :1 Max.	1.86 :1 Max.
4	Isolation:	80 dB Min.	-81.11 dB Min	-80.4 dB Min	-80.43 dB Min
5	Switching Speed	50 ns Max.	45.22 ns Max. See Graphs		
6	Input Power:	+25 dBm MAX (250 MHz to 18 GHz) +20 dBm MAX (HOT SWITCHING)	+25 dBm MAX (250 MHz to 18 GHz) +20 dBm MAX (HOT SWITCHING)		
7	Control Signal:	TTL Logic See Logic Table	TTL Logic See Logic Table		
8	DC Supply:	+5 V to +15V @ 120 mA Nominal -5 V to -15V @ 65 mA Nominal	+5 to +15 V @ 101 mA -5 to -15 V @ 43 mA		

TTL LOGIC CONTROL TABLE							
A0	A1	A2	J0-J1	J0-J2	J0-J3	J0-J4	J0-J5
1	0	0	LOSS	ISO.	ISO.	ISO.	ISO.
0	1	0	ISO.	LOSS	ISO.	ISO.	ISO.
1	1	0	ISO.	ISO.	LOSS	ISO.	ISO.
0	0	1	ISO.	ISO.	ISO.	LOSS	ISO.
1	0	1	ISO.	ISO.	ISO.	ISO.	LOSS

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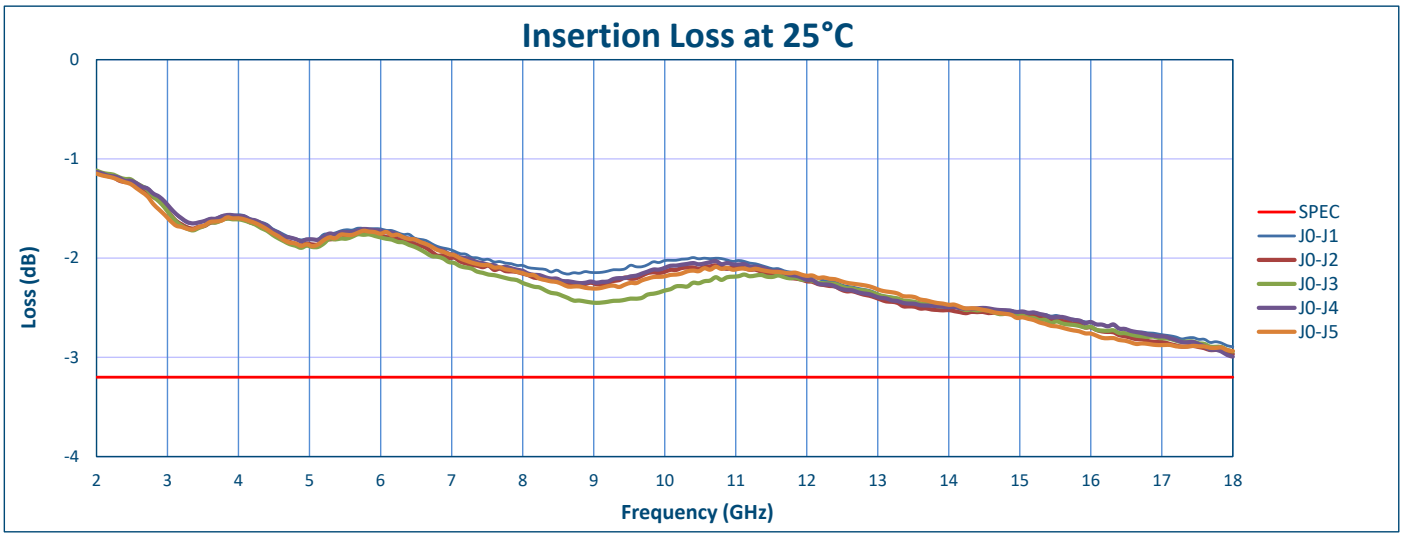

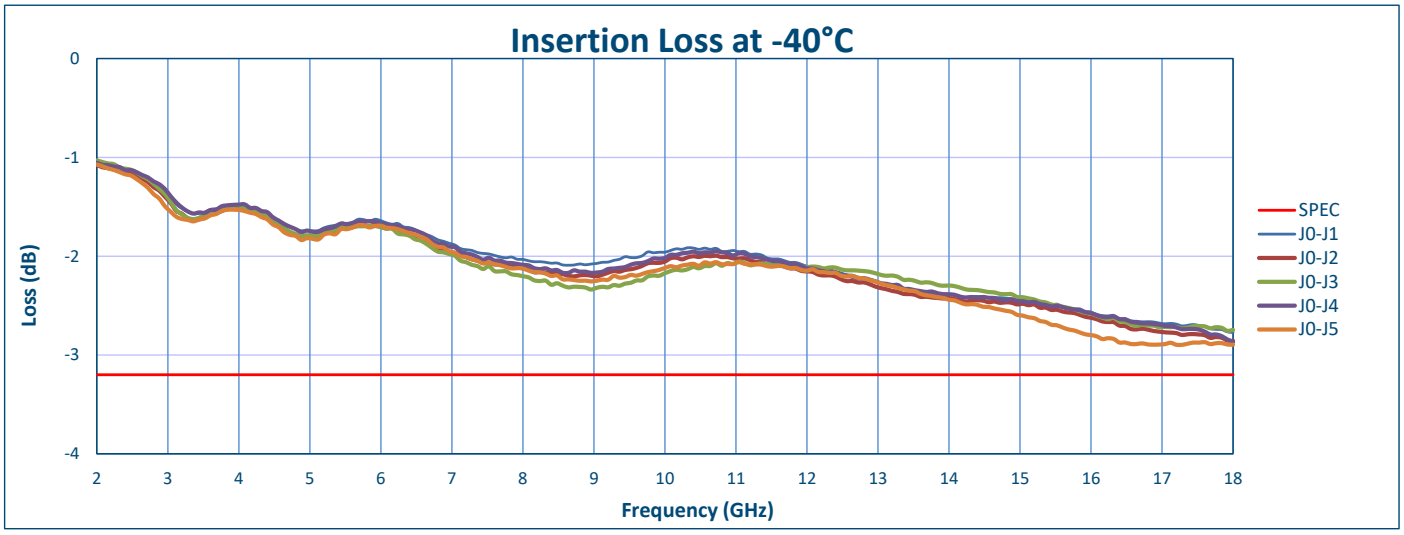

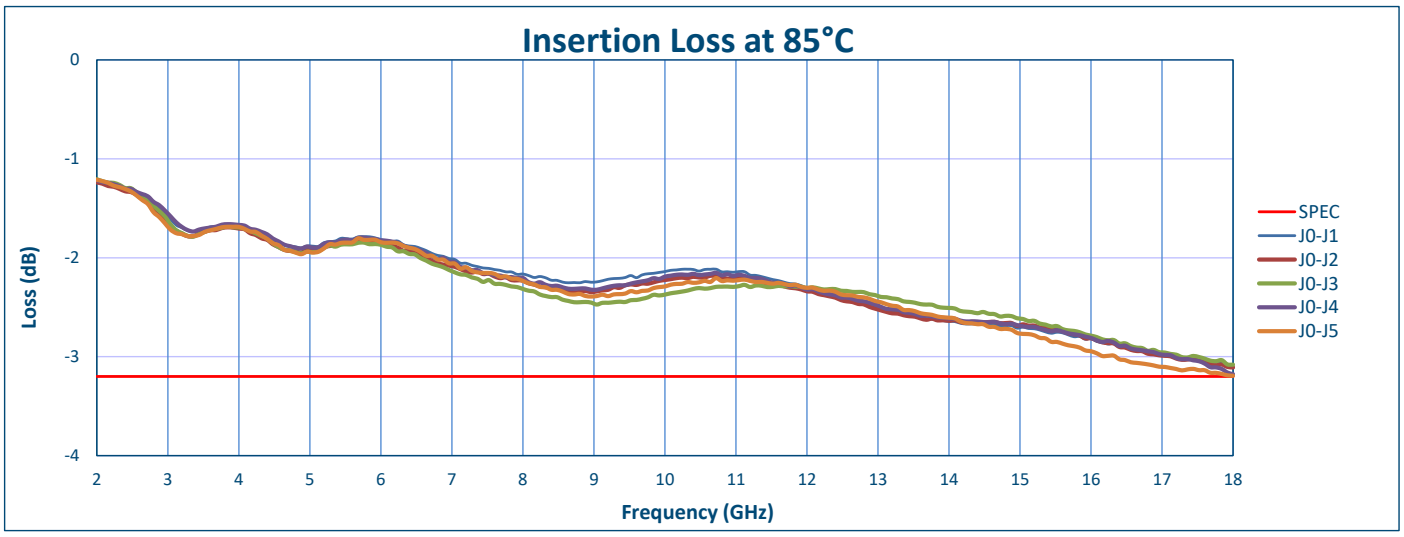

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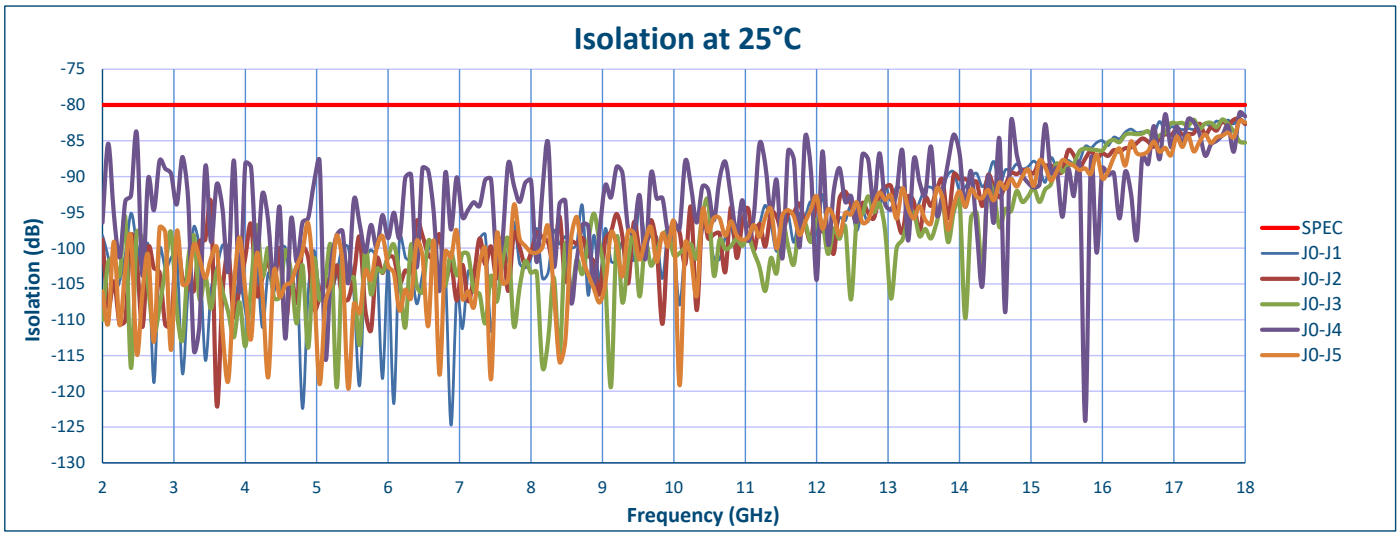

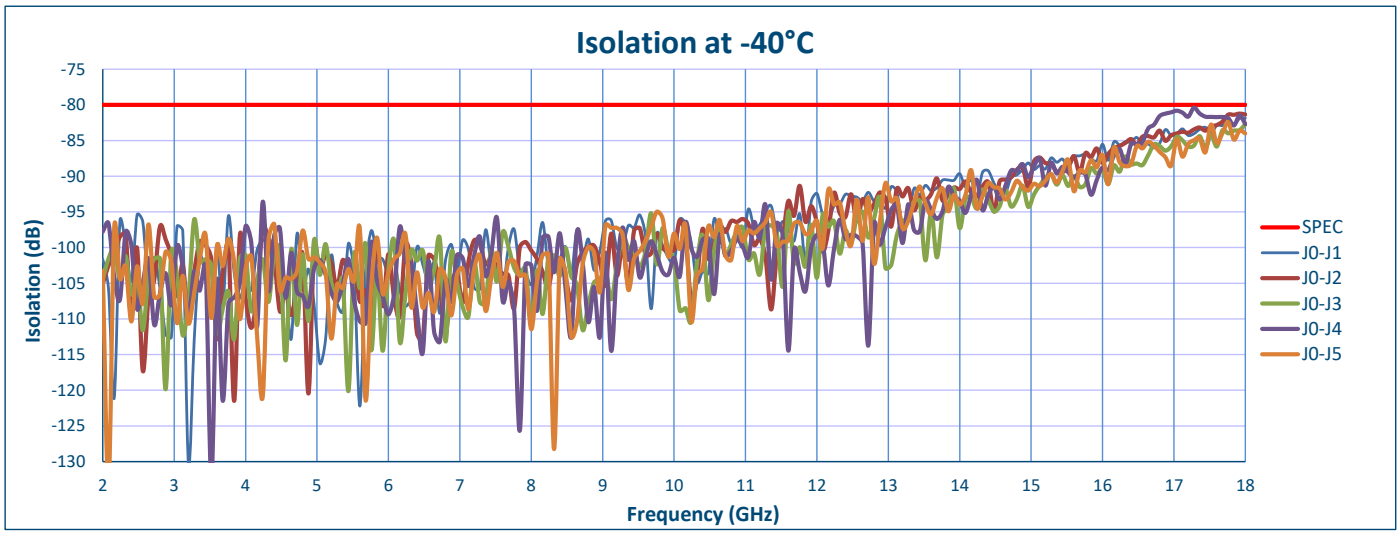

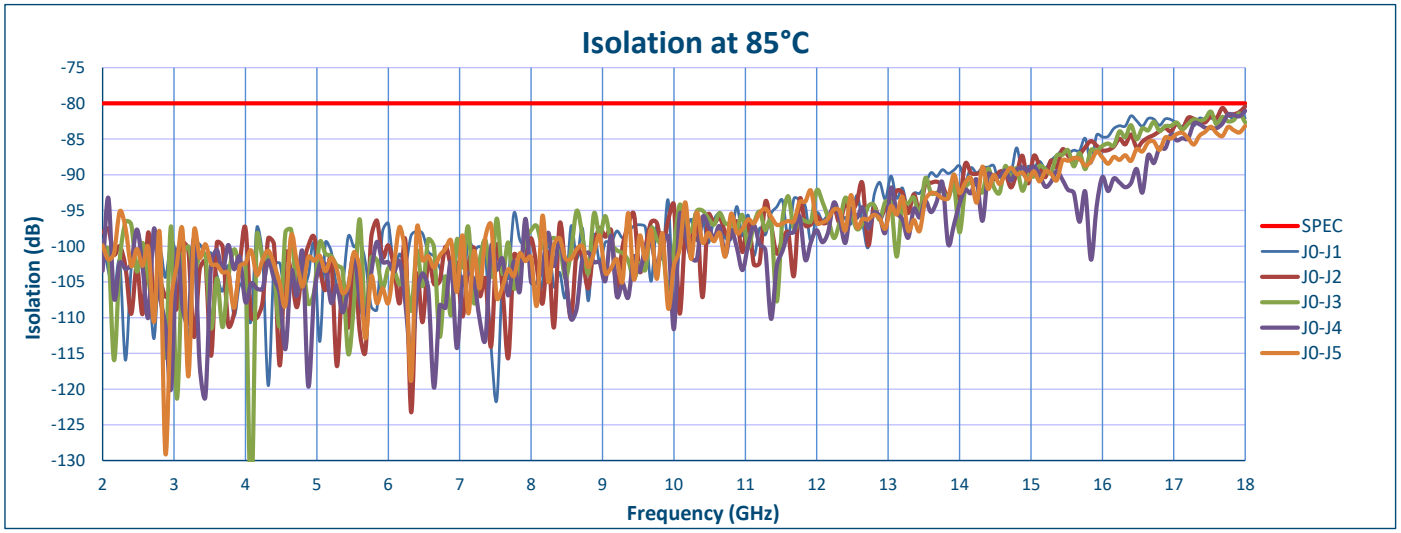

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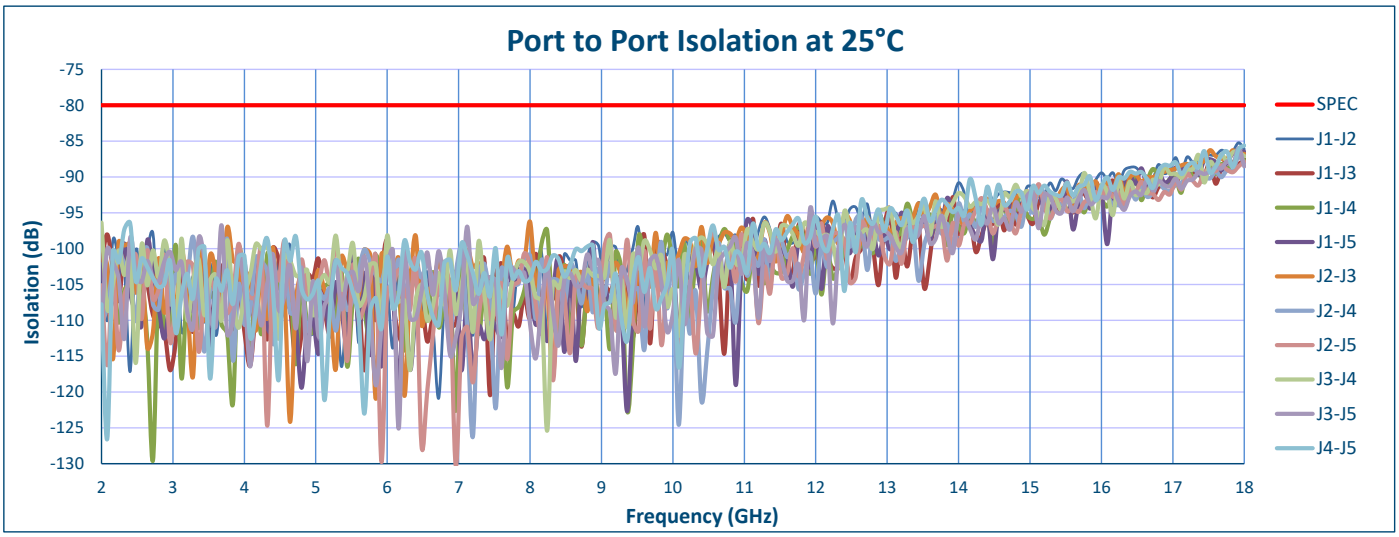

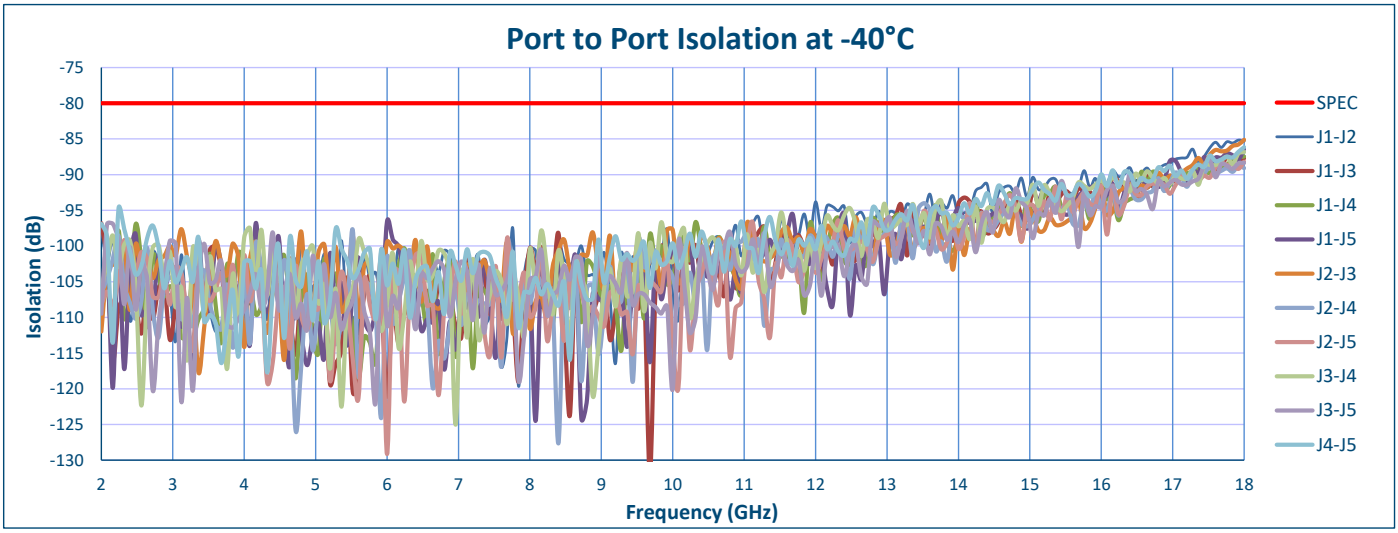

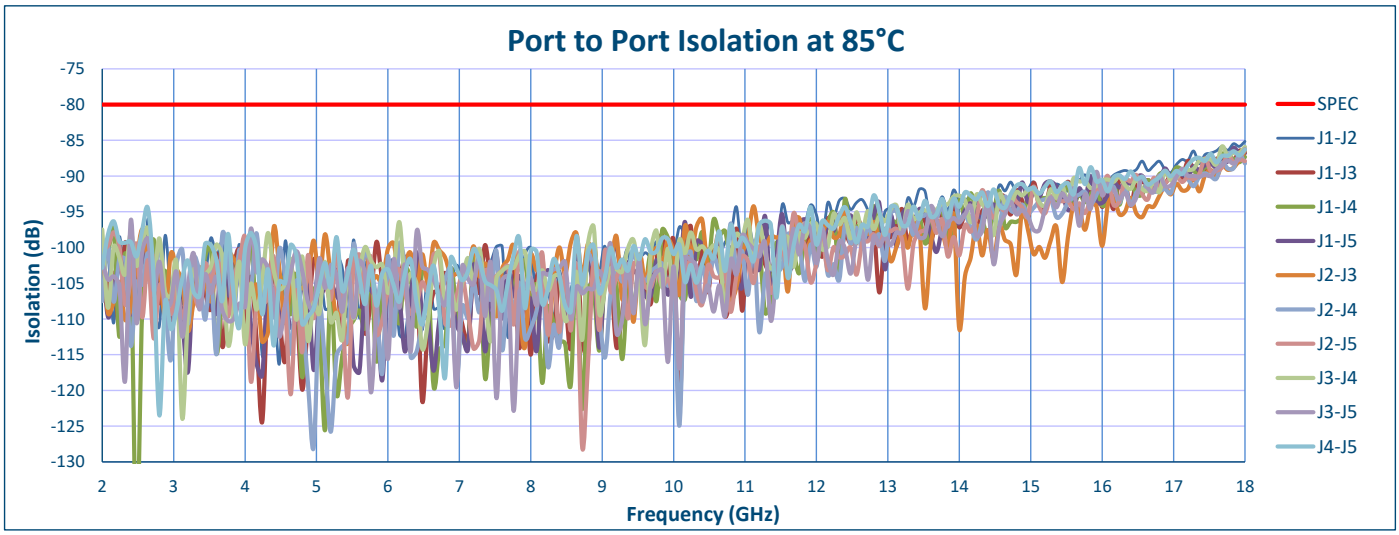

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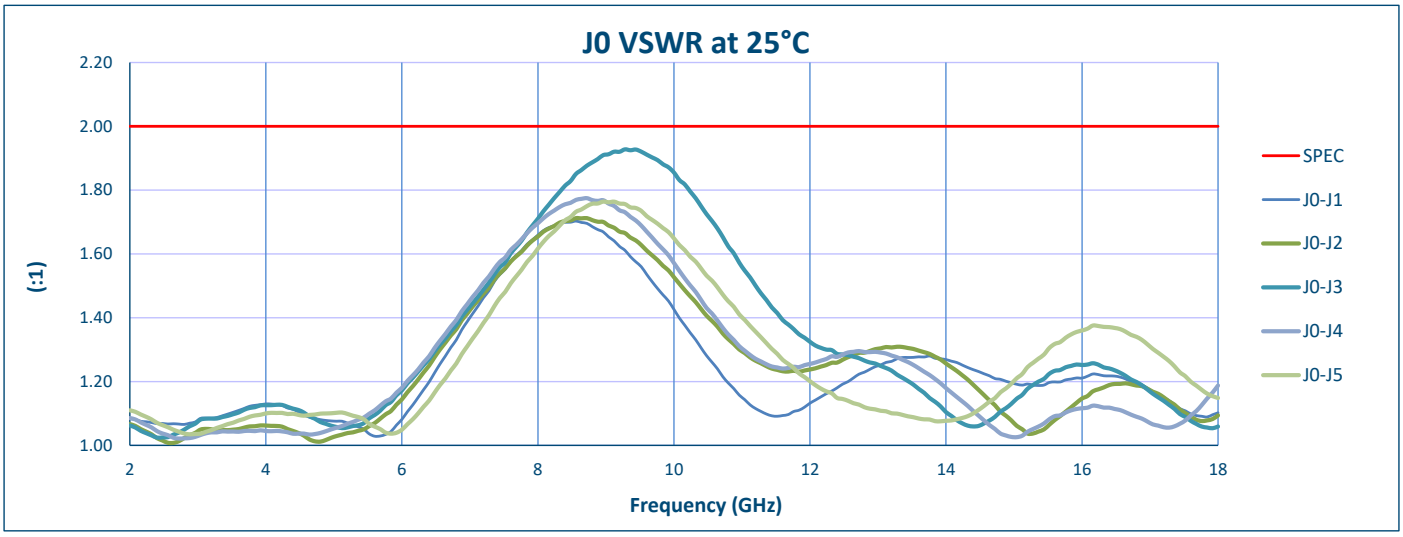

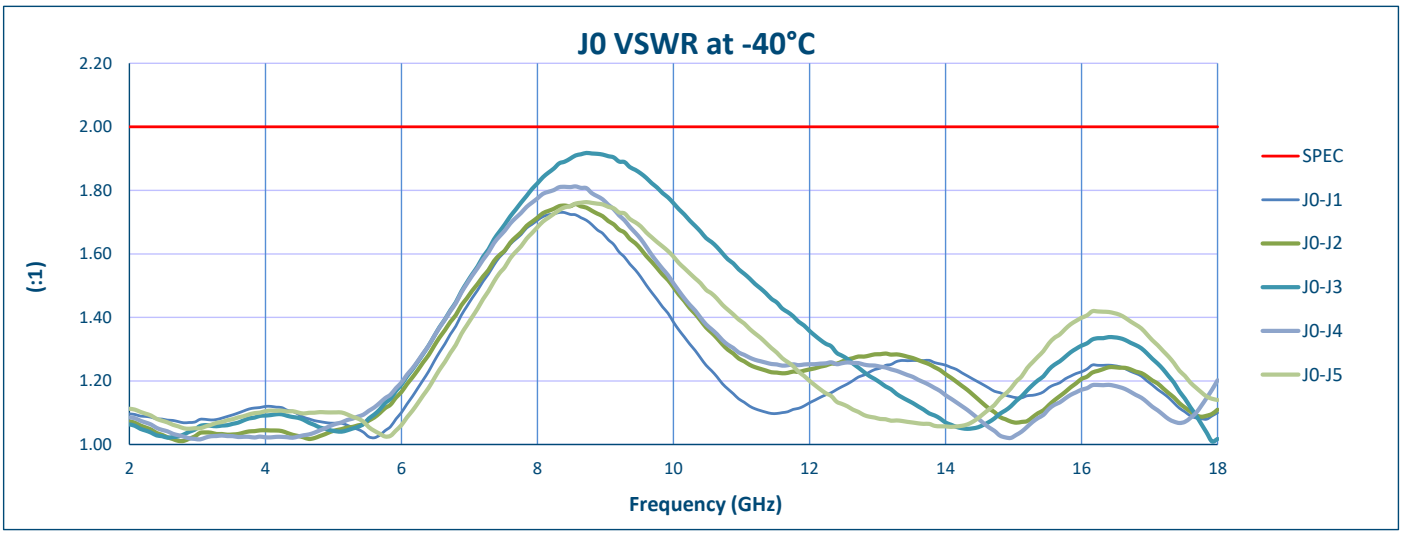

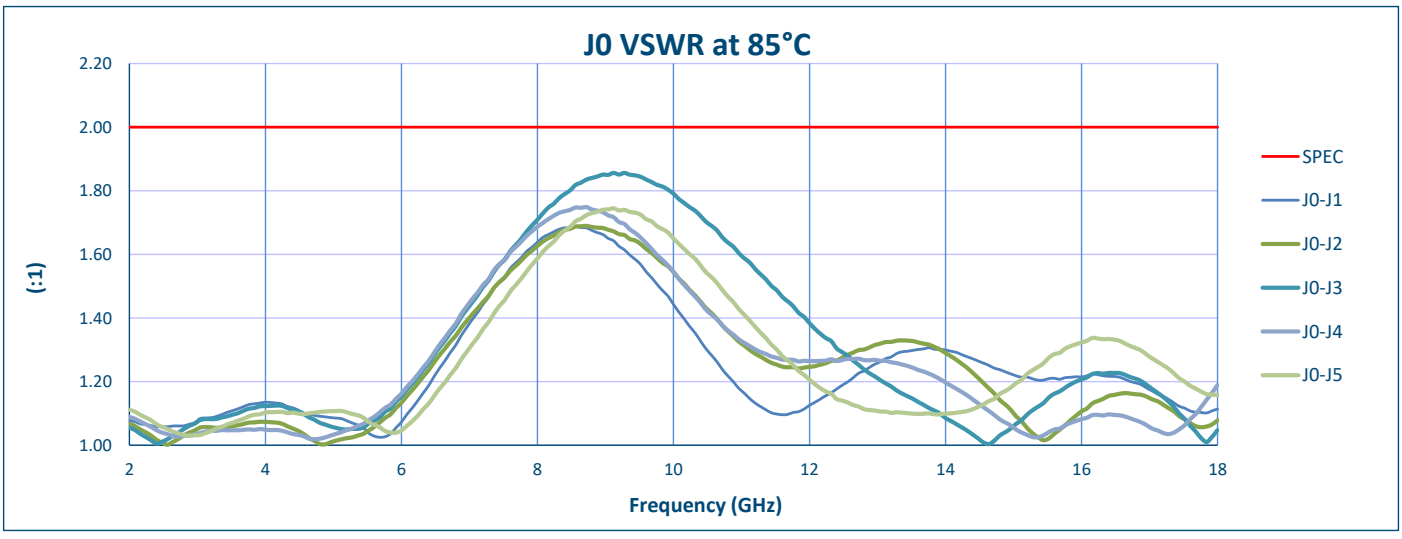

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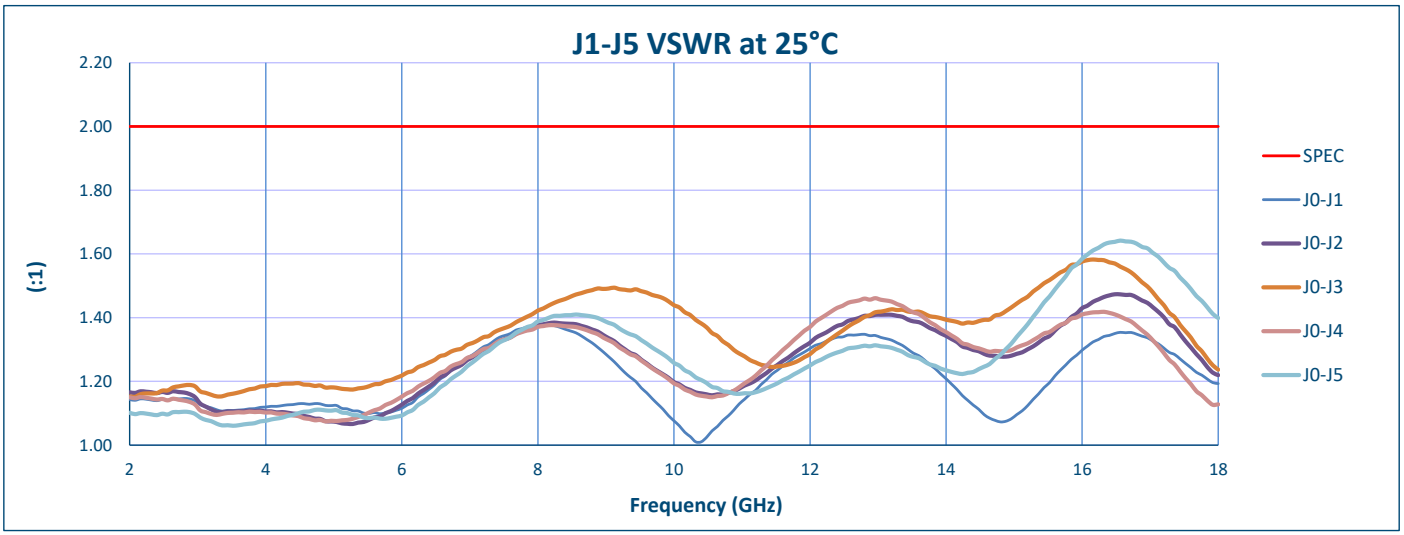

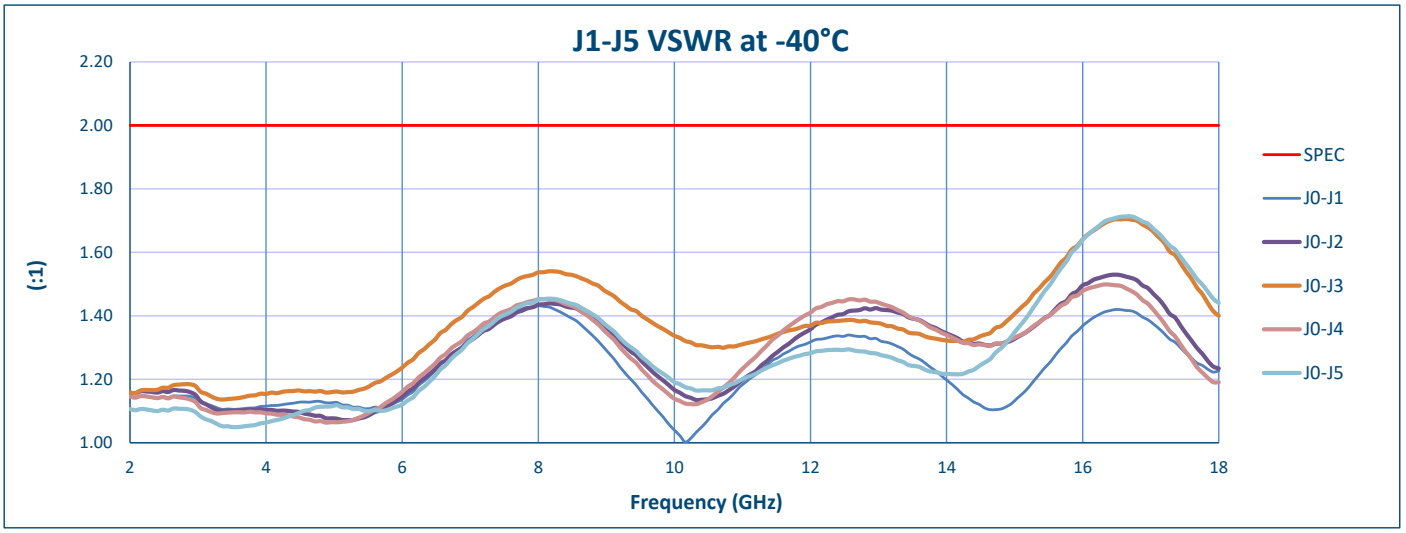

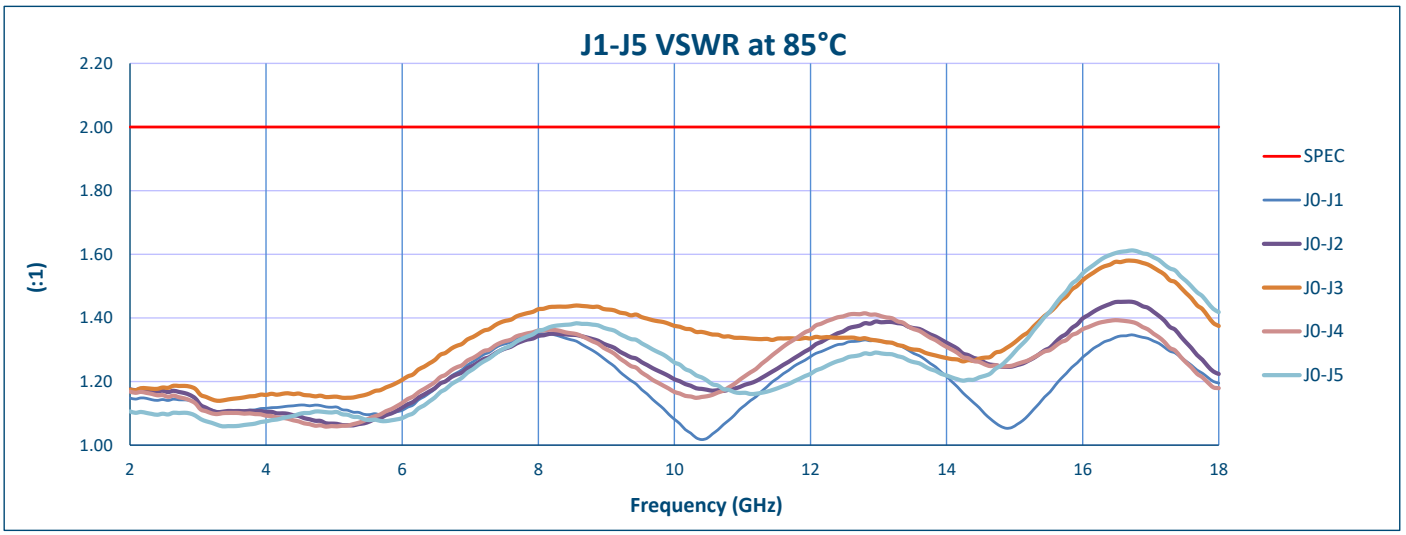

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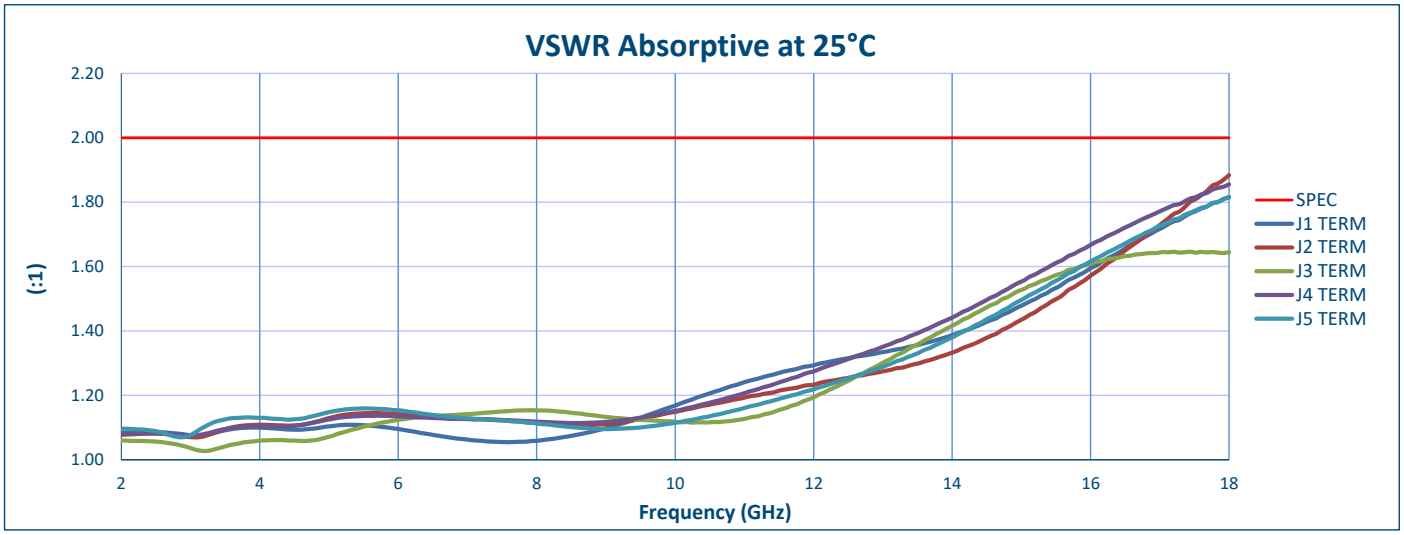

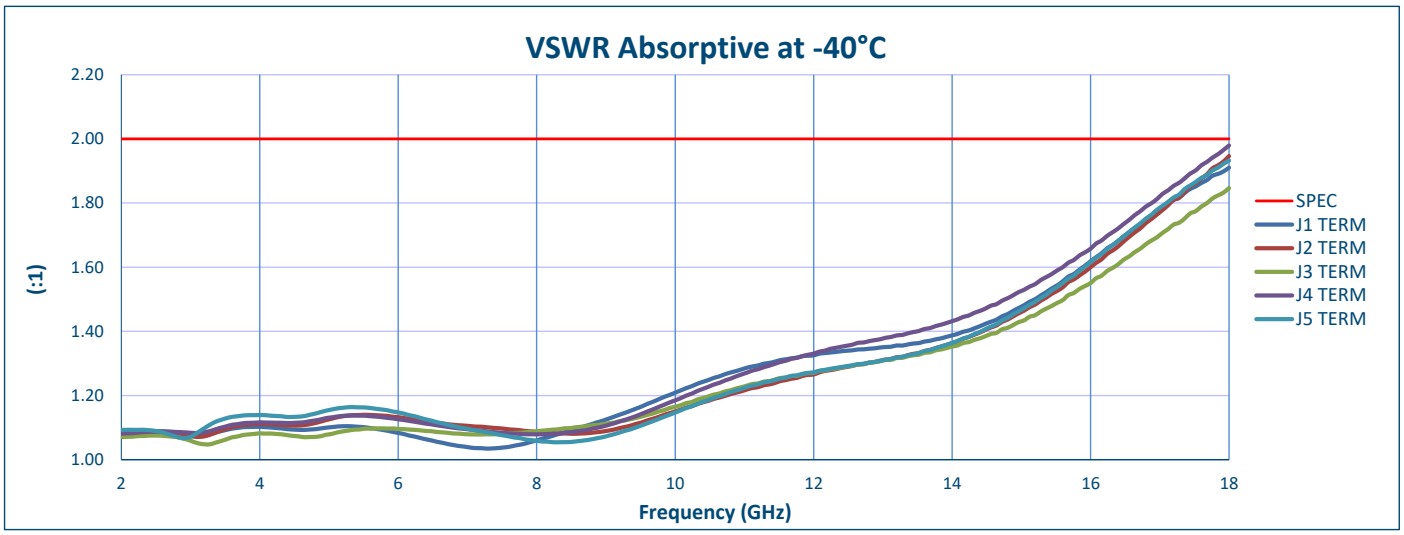

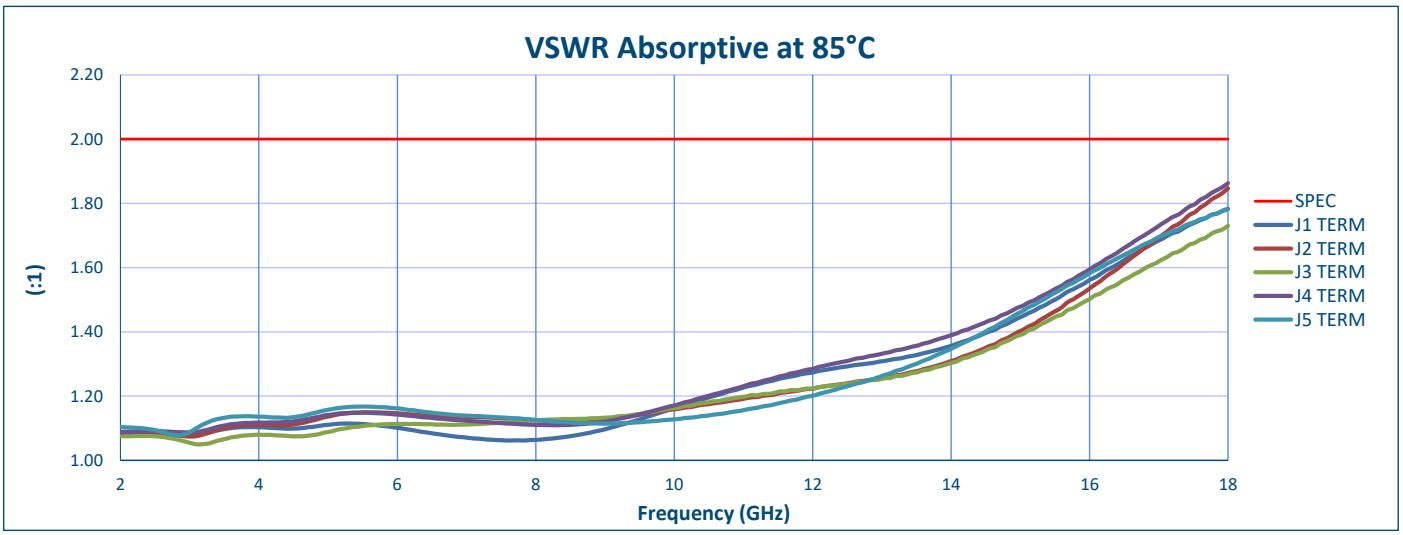

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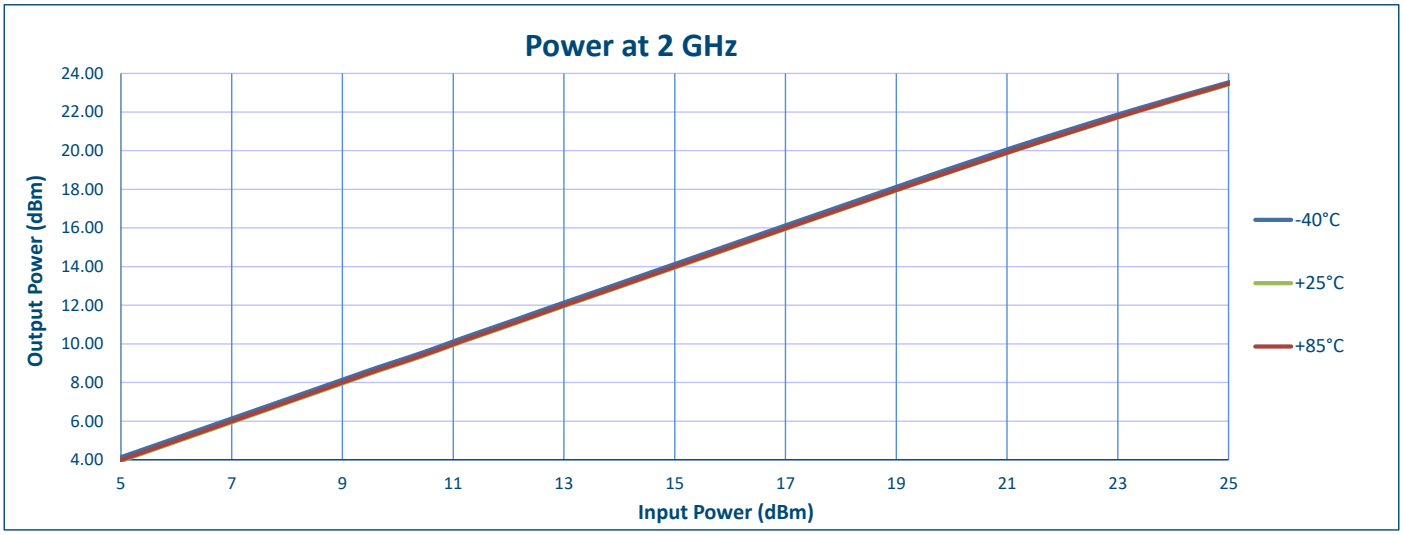

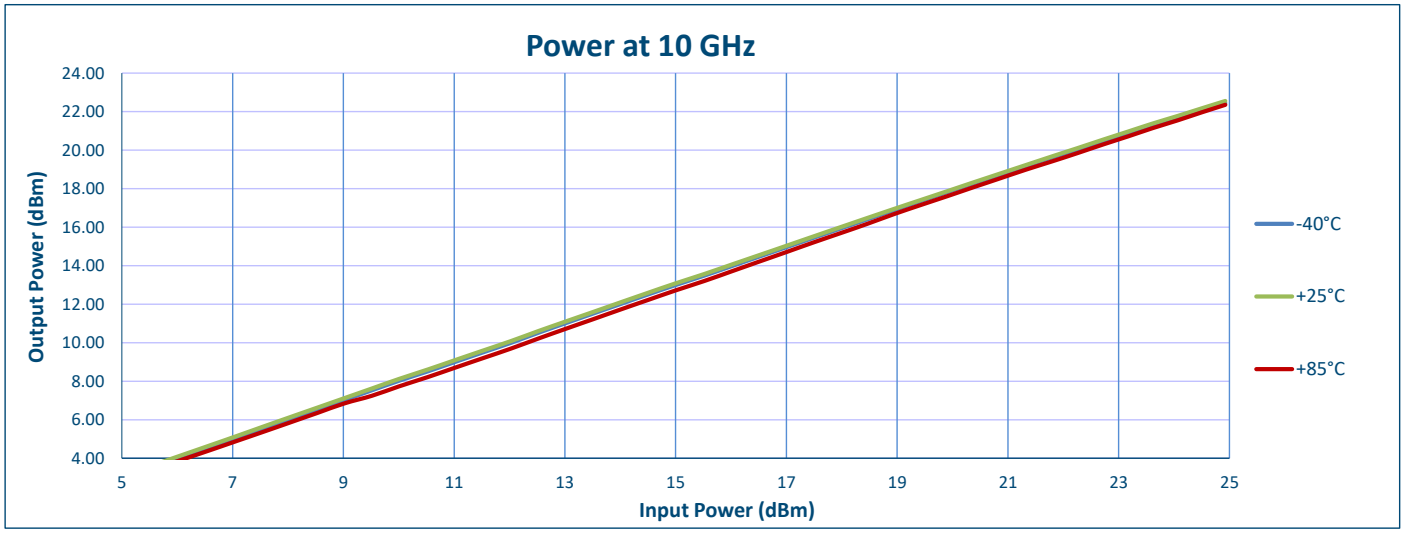

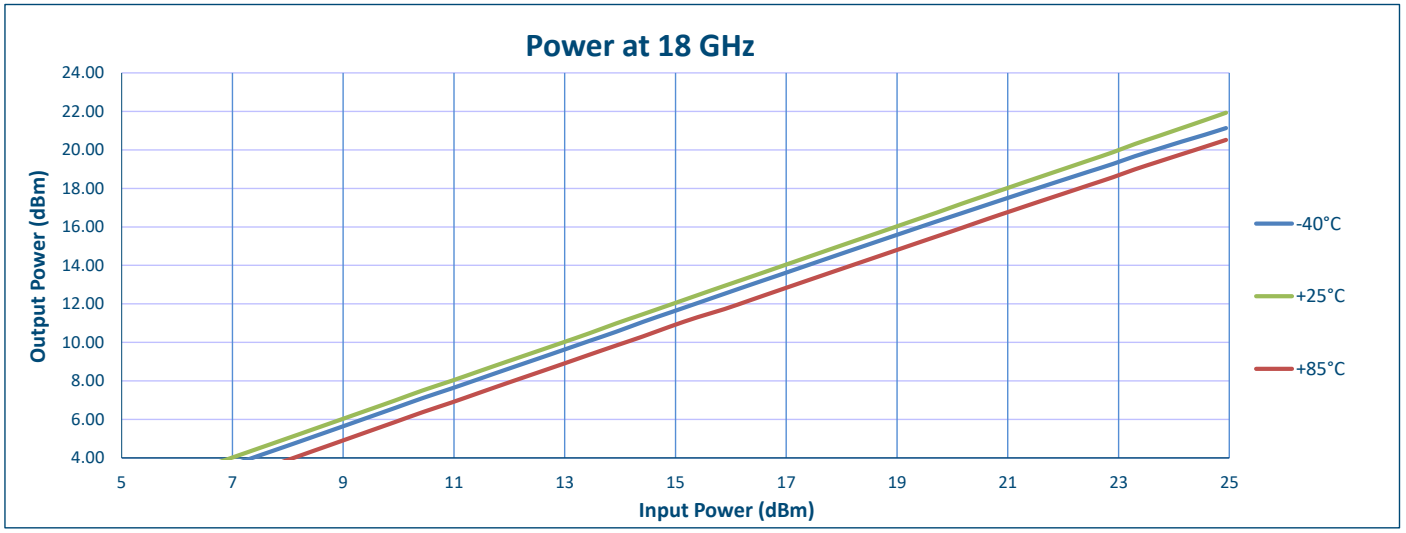

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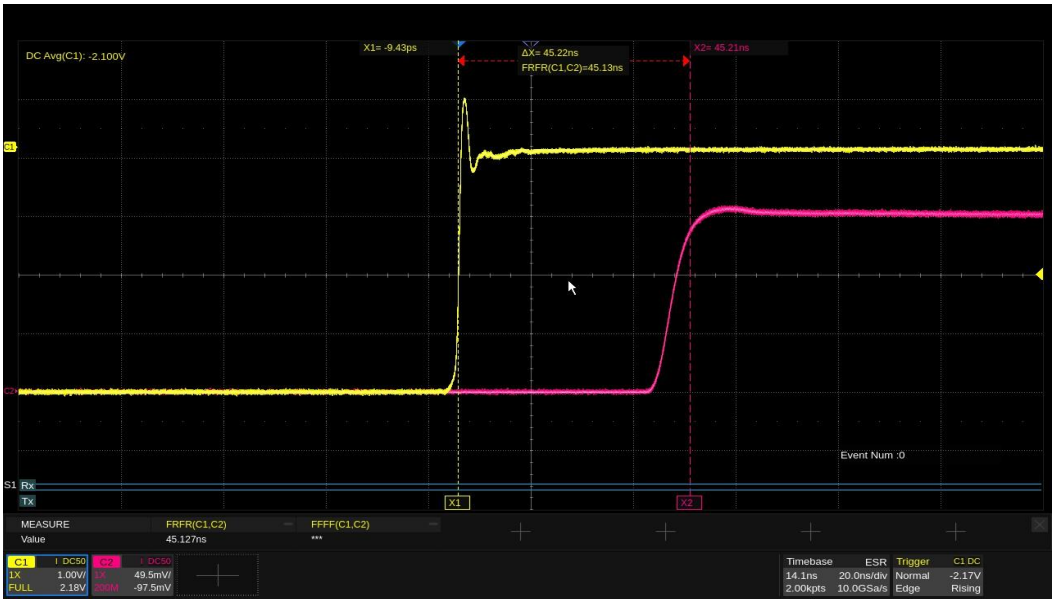
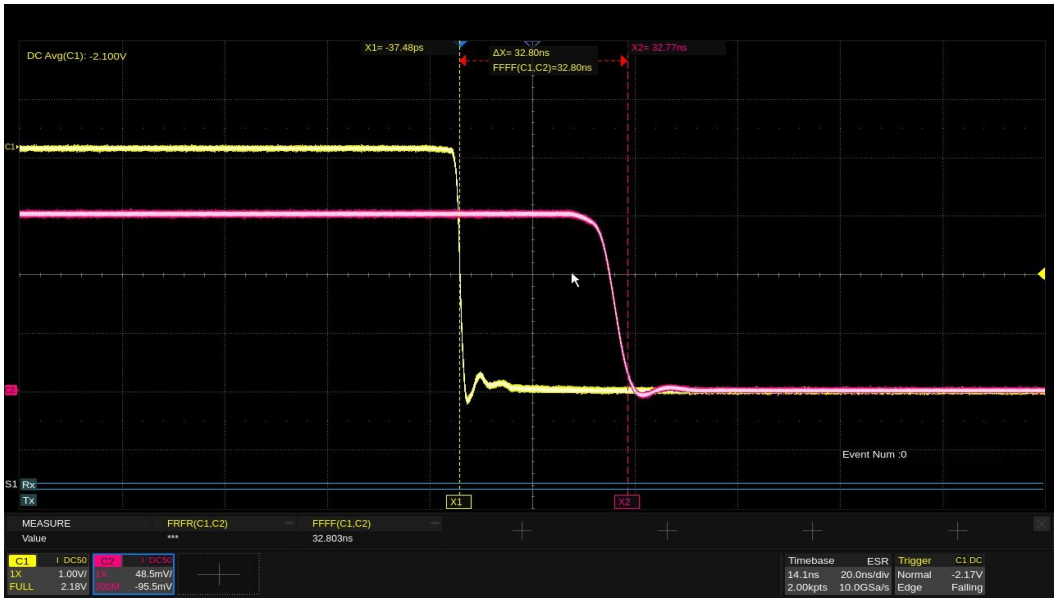
Switching Speed On



Yellow: TTL
Pink: RF
Switching Speed: 45.22 ns

Switching Speed Off



Yellow: TTL
Pink: RF
Switching Speed: 32.80 ns

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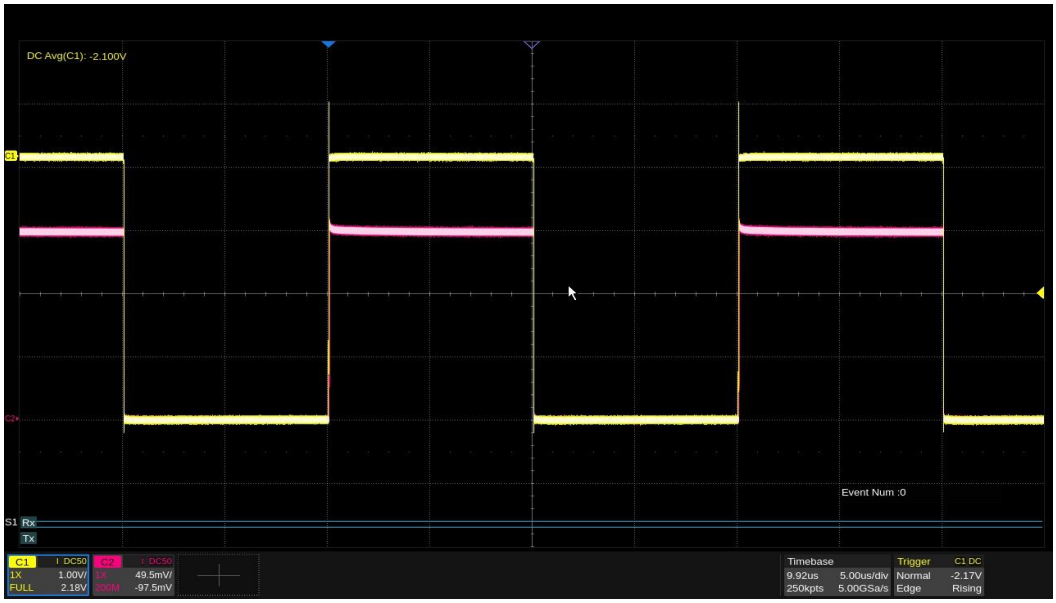
Full Pulse



Yellow: TTL
Pink: RF

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