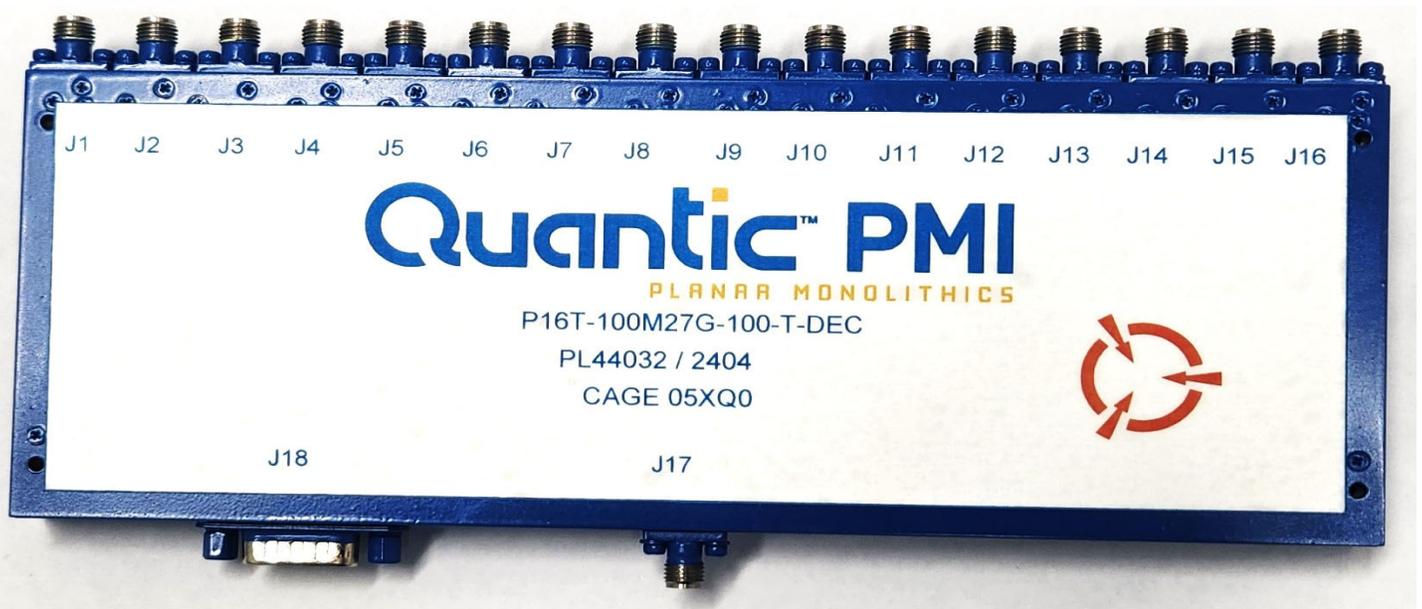


**TYPICAL CHARACTERISTICS
ON
P16T-100M27G-100-T-DEC**

PMI MODEL P16T-100M27G-100-T-DEC IS A SINGLE POLE 16 THROW SOLID STATE ABSORPTIVE SWITCH OPERATING OVER THE 100 MHz TO 27 GHz FREQUENCY RANGE. THIS MODEL OFFERS A TYPICAL INSERTION LOSS OF 10 dB WHILE MAINTAINING A TYPICAL ISOLATION OF 70 dB.



REPORTED BY Shane O'Neill
AUTHOR Noor Azhar
DATE January 29th 2024

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Email: sales@quanticpmi.com

**TYPICAL CHARACTERISTICS
ON
P16T-100M27G-100-T-DEC**

PRODUCT FEATURE

DESCRIPTION:

PMI MODEL P16T-100M27G-100-T-DEC IS A SINGLE POLE 16 THROW SOLID STATE ABSORPTIVE SWITCH OPERATING OVER THE 100 MHz TO 27 GHz FREQUENCY RANGE. THIS MODEL OFFERS A TYPICAL INSERTION LOSS OF 10 dB WHILE MAINTAINING A TYPICAL ISOLATION OF 70 dB.

SPECIFICATIONS:

- FREQUENCY RANGE:..... 0.1 to 27 GHz
- INSERTION LOSS:..... 8 dB MAX, 0.1-18 GHz
10 dB MAX, 18-27 GHz
- VSWR (IN/OUT):..... 2.5:1 MAX, 0.1-18 GHz
3:1 MAX, 18-27 GHz
- VSWR (OFF):..... 2.5:1 MAX, 0.1-18 GHz
3:1 MAX, 18-27 GHz
- ISOLATION:..... 70 dB MIN, 0.1-1 GHz
90 dB MIN, 1-18 GHz
80 dB MIN, 18-27 GHz
- INPUT POWER:..... 20 dBm CW MAX
- SWITCHING SPEED:..... 100 ns MAX
- DC VOLTAGE :..... 5 V @ 1100 mA
-12 V @ 720 mA
- CONTROL:..... TTL LOGIC SEE LOGIC TABLE
- CONNECTORS:..... 2.92 mm FEMALE
- FINISH:..... PAINTED BLUE MOUNTING SURFACE
GOLD PLATED
- SIZE:..... 8.00" X 3.00" X 0.67"
- WEIGHT:..... 2 LBS

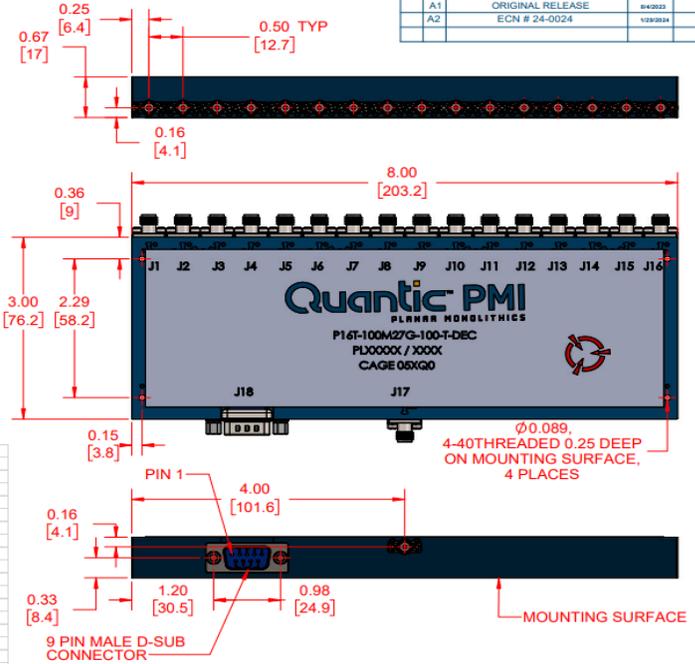
LOGIC TABLE				
C1	C2	C3	C4	CONNECTOR
0	0	0	0	J1
0	0	0	1	J2
0	0	1	0	J3
0	0	1	1	J4
0	1	0	0	J5
0	1	0	1	J6
0	1	1	0	J7
0	1	1	1	J8
1	0	0	0	J9
1	0	0	1	J10
1	0	1	0	J11
1	0	1	1	J12
1	1	0	0	J13
1	1	0	1	J14
1	1	1	0	J15
1	1	1	1	J16

J18	
PIN	FUNCTION
1	CTRL 1
2	CTRL 2
3	CTRL 3
4	CTRL 4
5	N/C
6	+5VDC
7	GND
8	GND
9	-12VDC

ENVIRONMENTAL RATINGS:

- TEMPERATURE:..... -40°C TO +85°C (OPERATING)
-65°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

ZONE	REV.	DESCRIPTION	DATE	APPROVED
A1		ORIGINAL RELEASE	04/2002	
A2		ECN # 24-0024	10/2004	



PMI CONFIDENTIAL AND PROPRIETARY

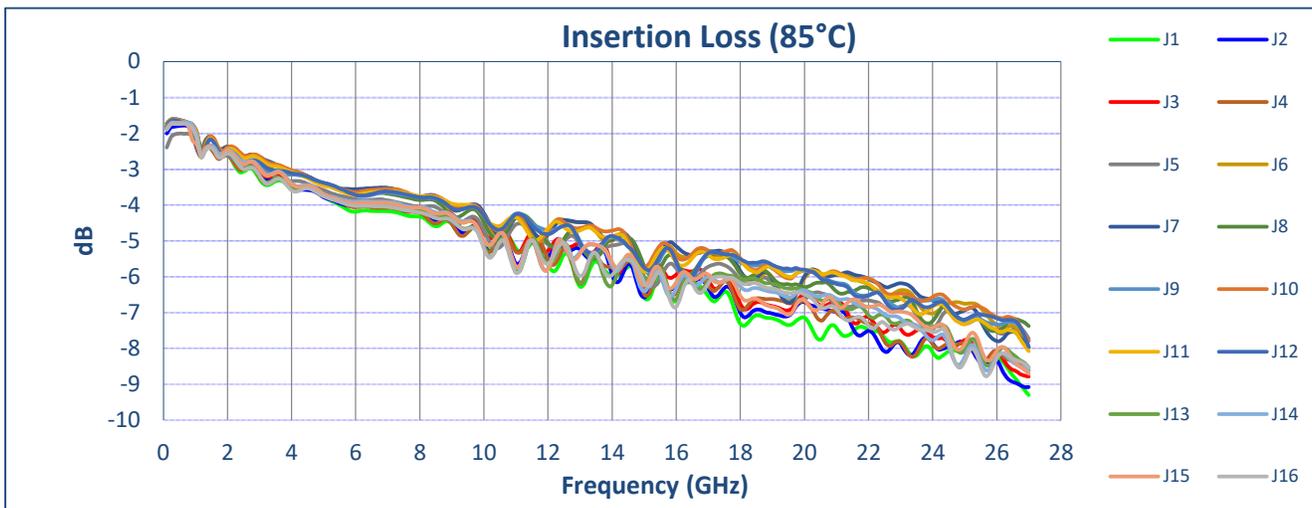
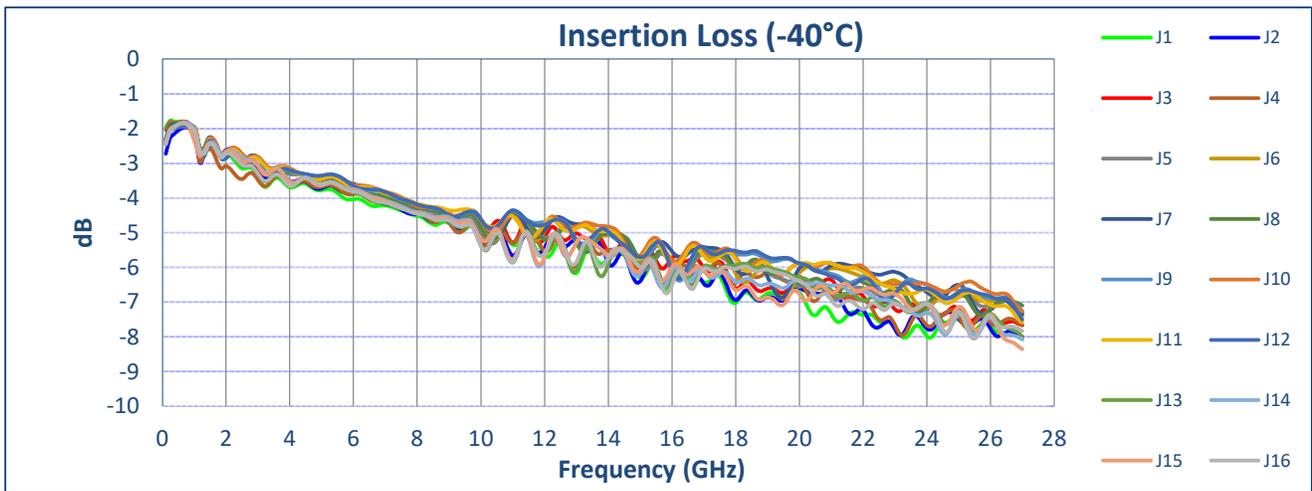
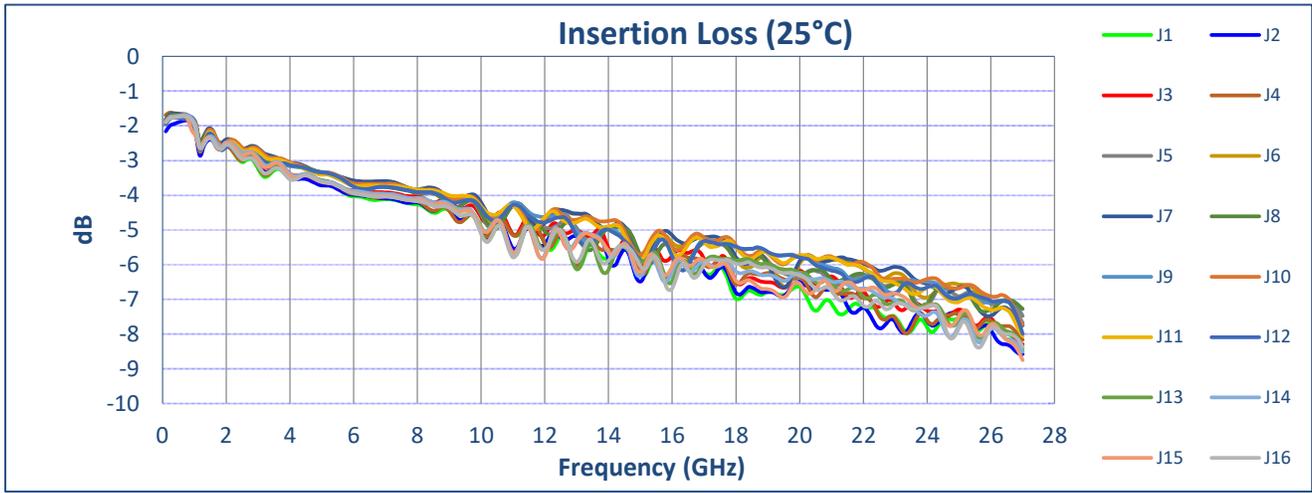
MATERIAL		PART NO.	
DATE	DESCRIPTION	REV.	DATE
APPROVALS	DATE	APPROVALS	DATE
DESIGNED BY	S AZHAR	DESIGNED BY	S AZHAR
ISSUED		ISSUED	
TITLE	OUTLINE	TITLE	OUTLINE
SIZE	P16T-100M27G-100-T-DEC	SIZE	P16T-100M27G-100-T-DEC
REV	B 05XQ0	REV	B 05XQ0
APP. NO.	27046920	APP. NO.	27046920
SCALE	1:1	SCALE	1:1
SHEET	1 OF 1	SHEET	1 OF 1

**TYPICAL CHARACTERISTICS
ON
P16T-100M27G-100-T-DEC**

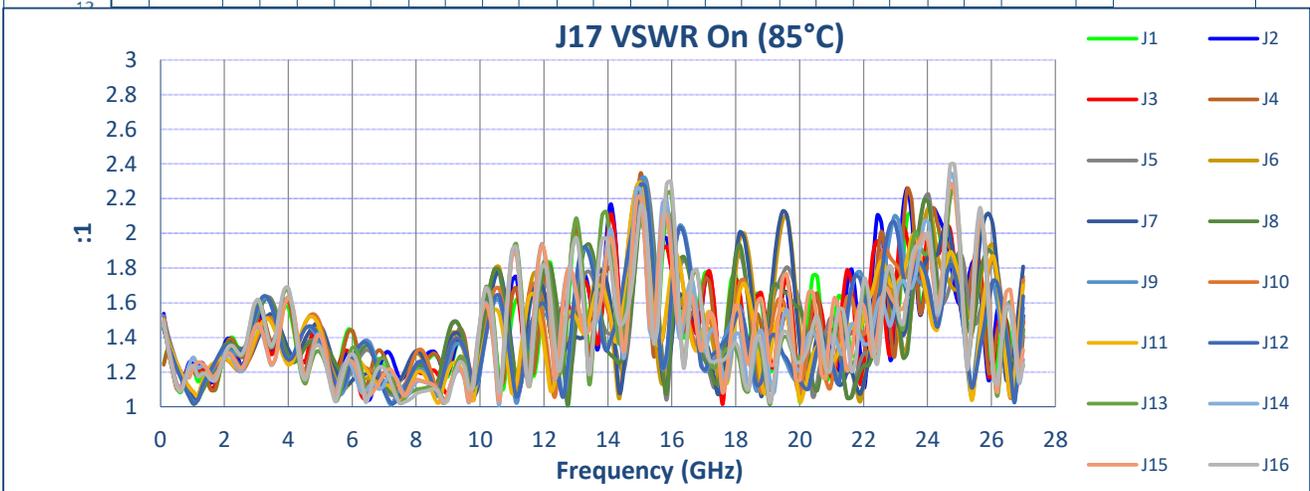
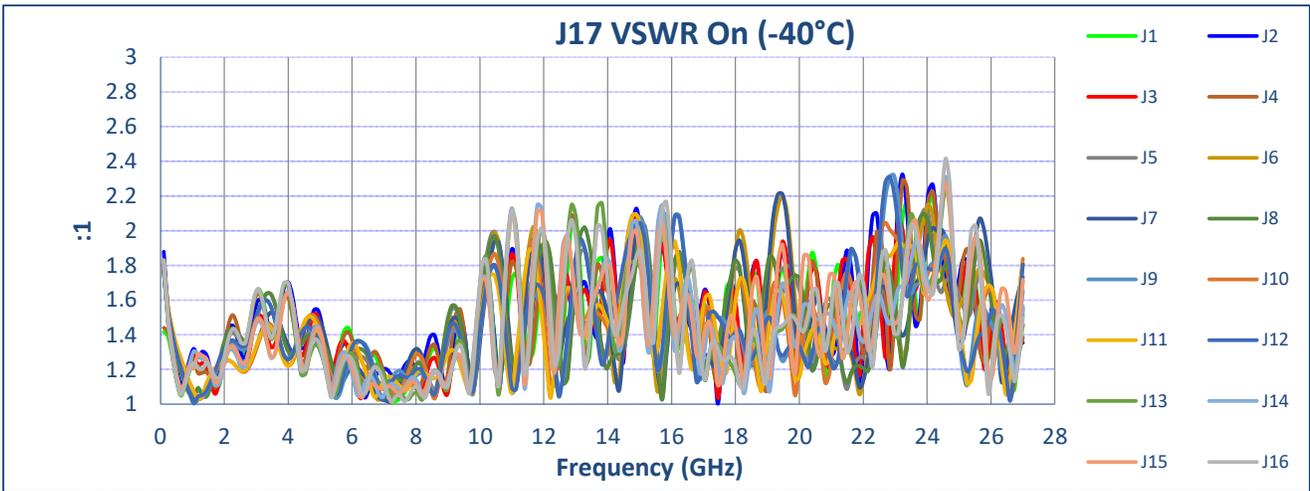
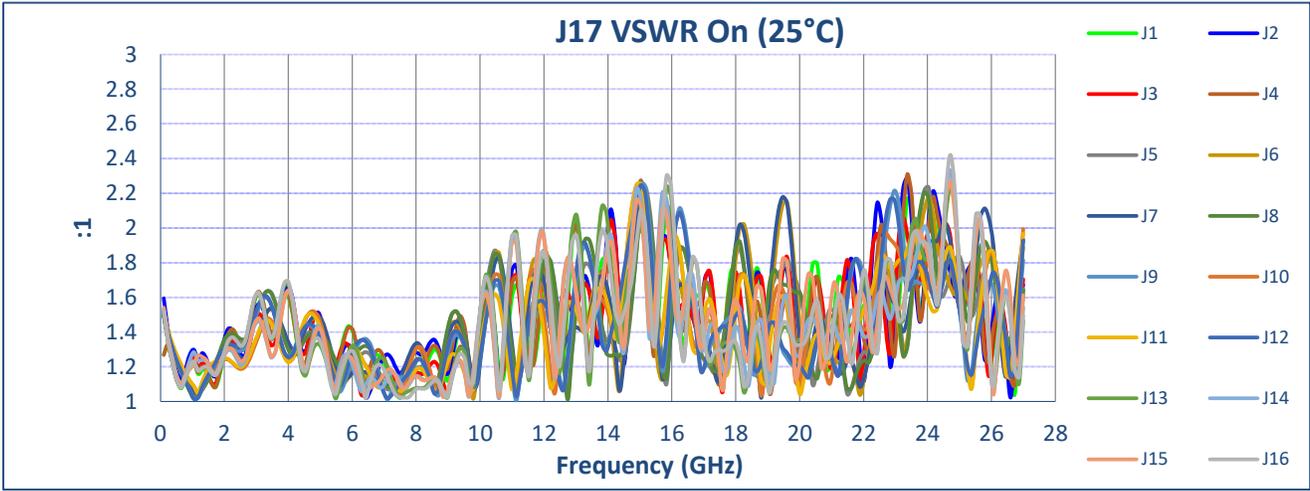
TEST DATA

TEST ITEM	PARAMETERS	SPECIFIED VALUE	TEST RESULTS		
			25°C	-40°C	85°C
1	Frequency Range	0.1 GHz to 27 GHz	0.1 GHz to 27 GHz		
2	Insertion Loss	8 dB Max., 0.1-18 GHz 10 dB Max., 18-27 GHz	6.98 dB 8.75 dB	7.03 dB 8.36 dB	7.36 dB 9.3 dB
3	VSWR: In/Out	2.5:1 Max., 0.1-18 GHz 3:1 Max., 18-27 GHz	2.36:1 2.59:1	2.33:1 2.87:1	2.39:1 2.54:1
4	VSWR: Off	2.5:1 Max., 0.1-18 GHz 3:1 Max., 18-27 GHz	2.36:1 2.59:1	2.23:1 2.87:1	2.39:1 2.54:1
5	Isolation	70 dB Min., 0.1-1 GHz 90 dB Min., 1-18 GHz 80 dB Min., 18-27 GHz	99.8 dB 92.9 dB 89.3 dB	98.7 dB 94.8 dB 90.5 dB	102.9 dB 94 dB 89.8 dB
6	Input Power	20 dBm CW Max Survival	PASS	PASS	PASS
7	Switching Speed Max	100 ns Max.	On: 47.60ns Off: 55.40ns Rise Time: 4.1ns Fall Time: 5.6ns	-	-
8	Power Supply	5 V @ 1100 mA -12 V @ 720 mA	5 V @ 1000 mA -12 V @ 370 mA	5 V @ 1000 mA -12 V @ 370 mA	5 V @ 1000 mA -12 V @ 370 mA

TYPICAL CHARACTERISTICS
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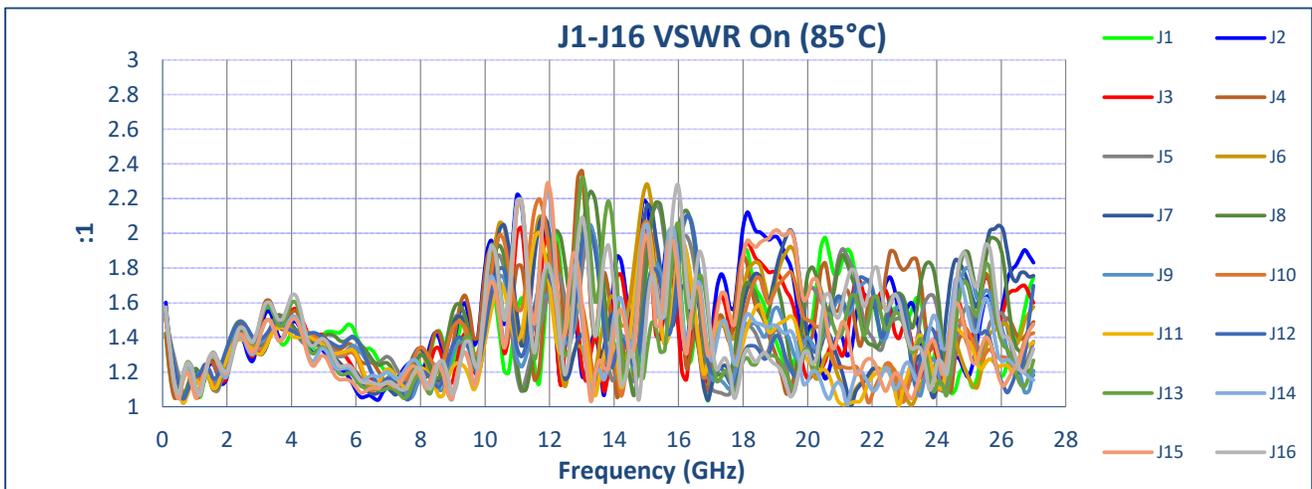
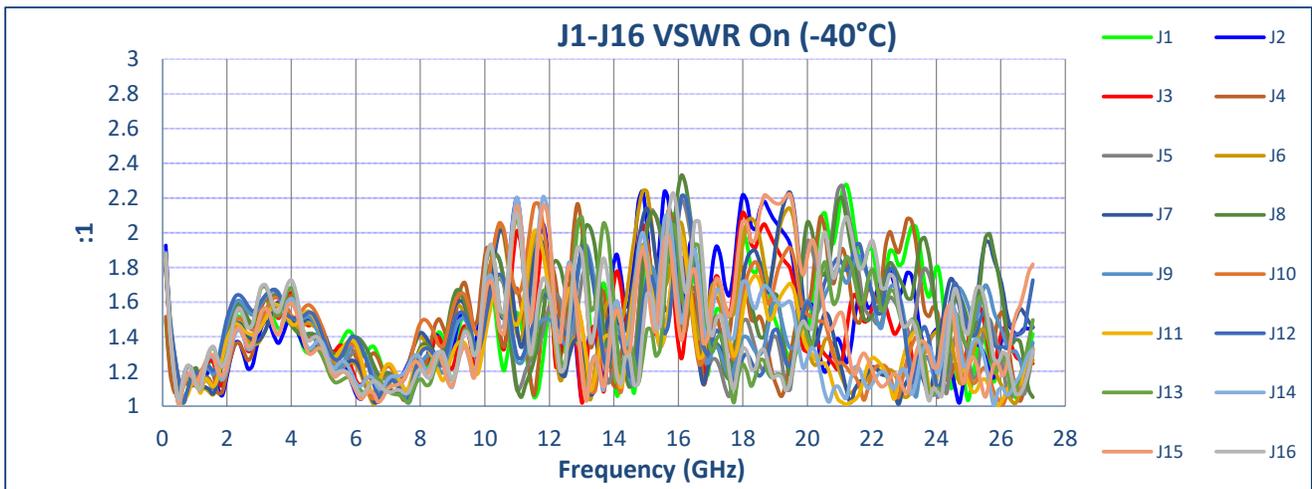
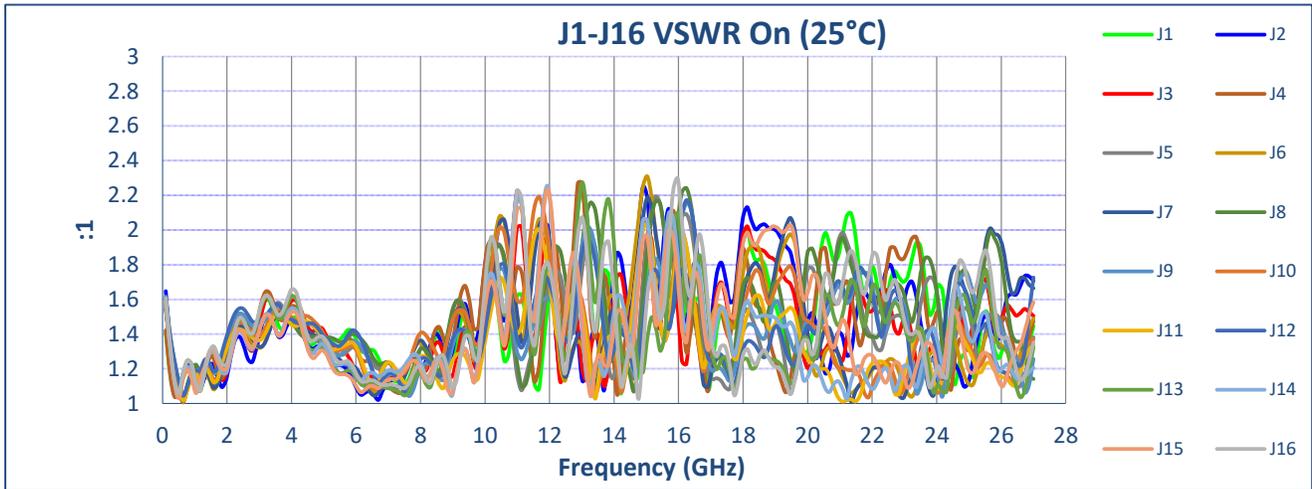


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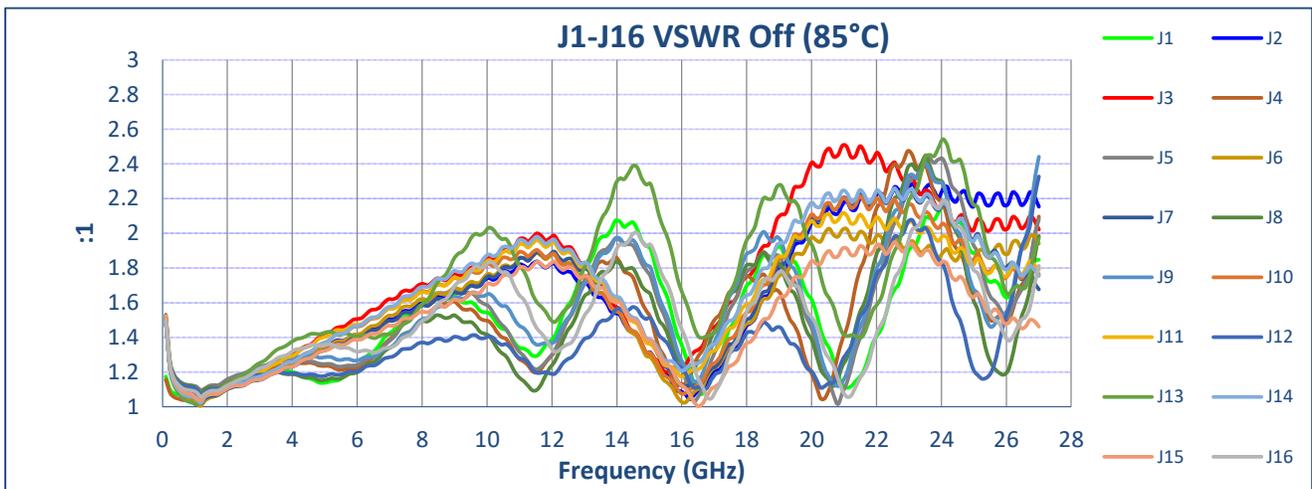
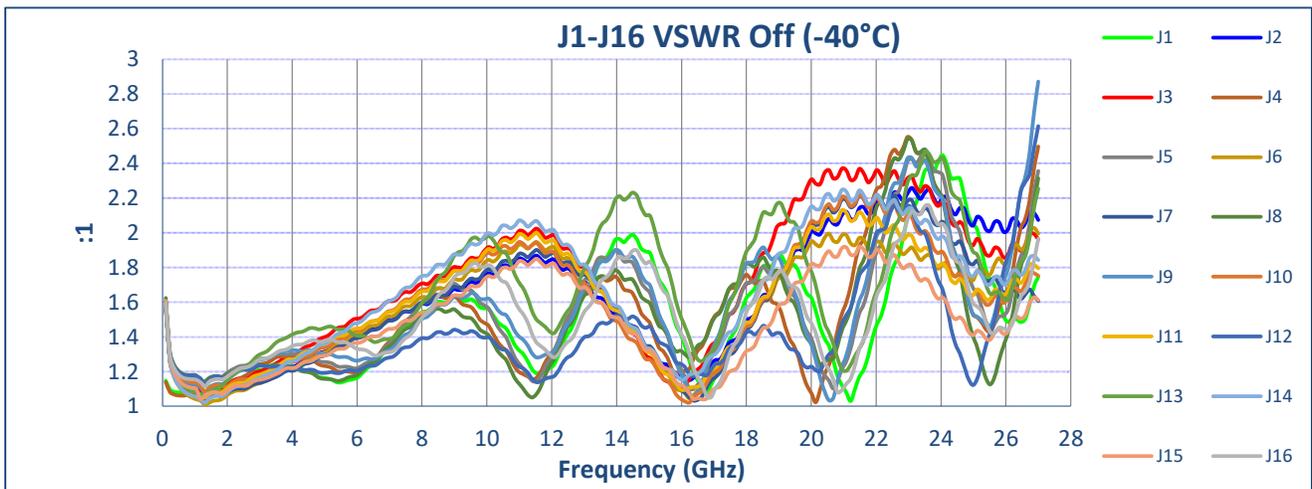
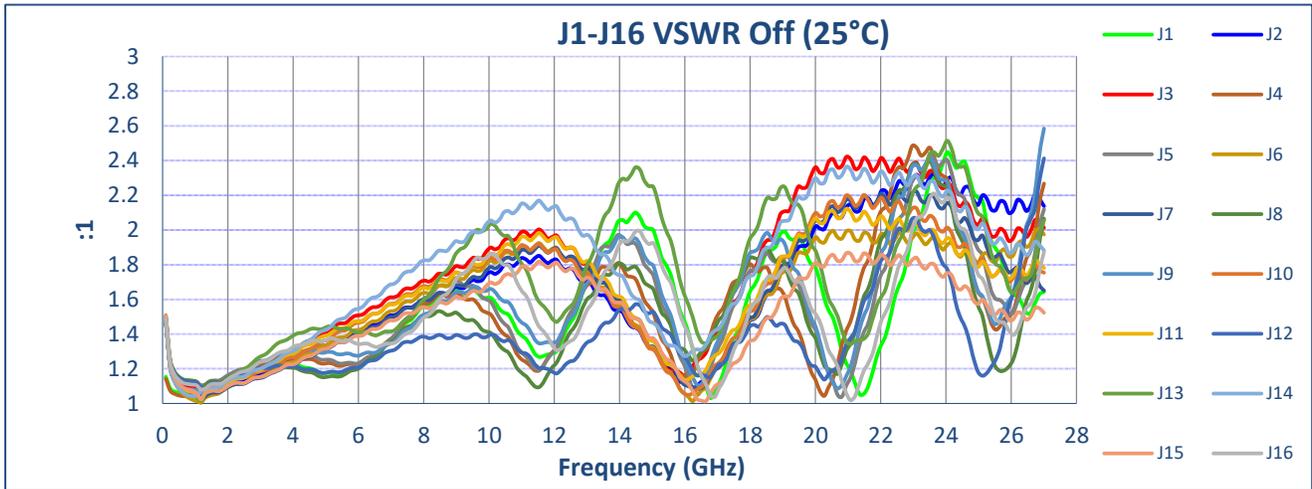
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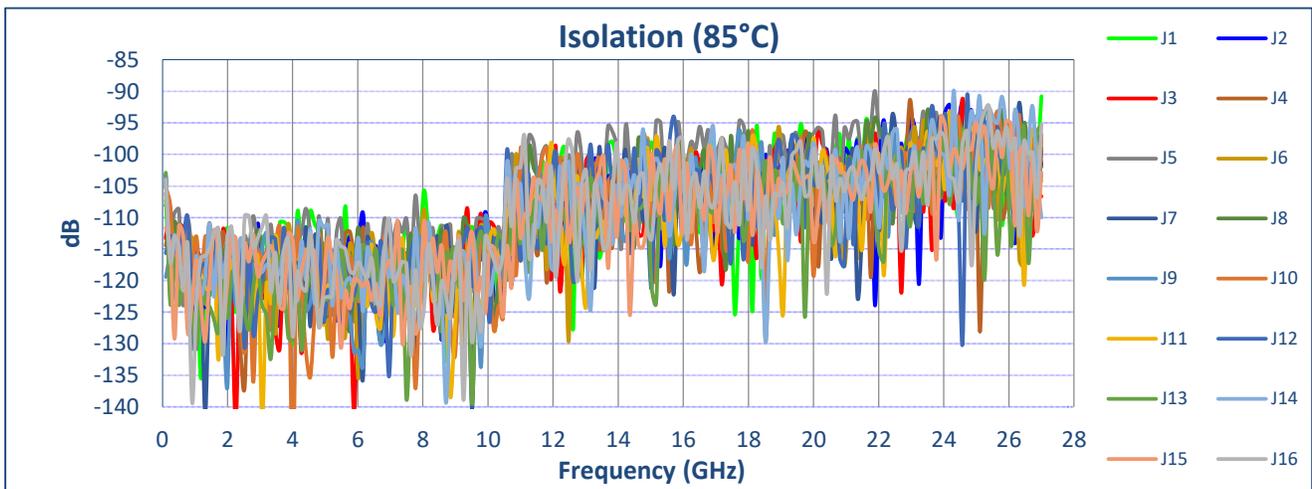
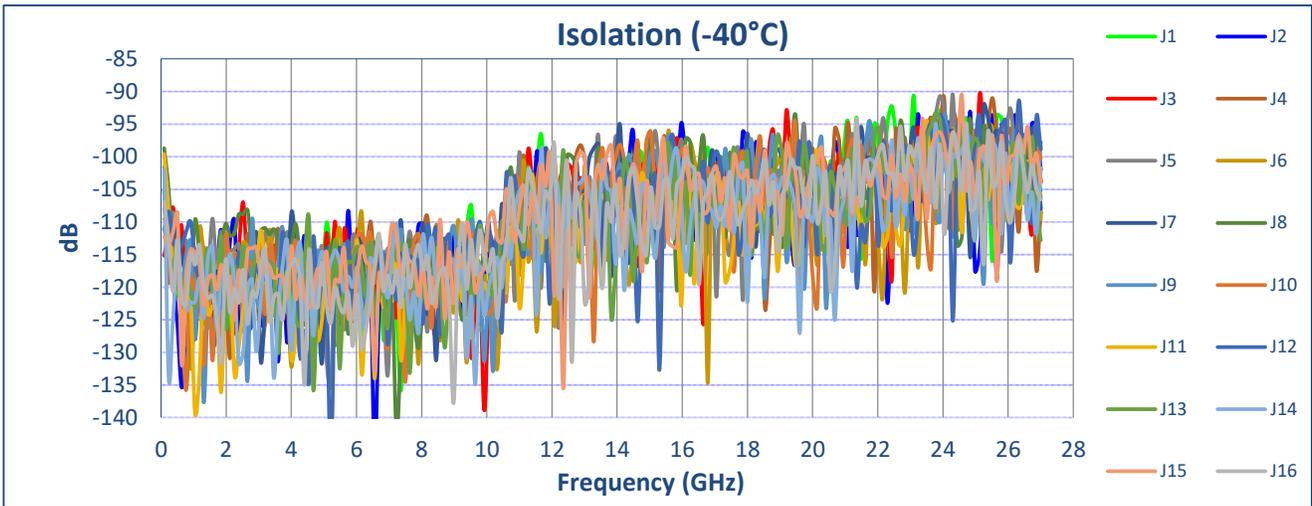
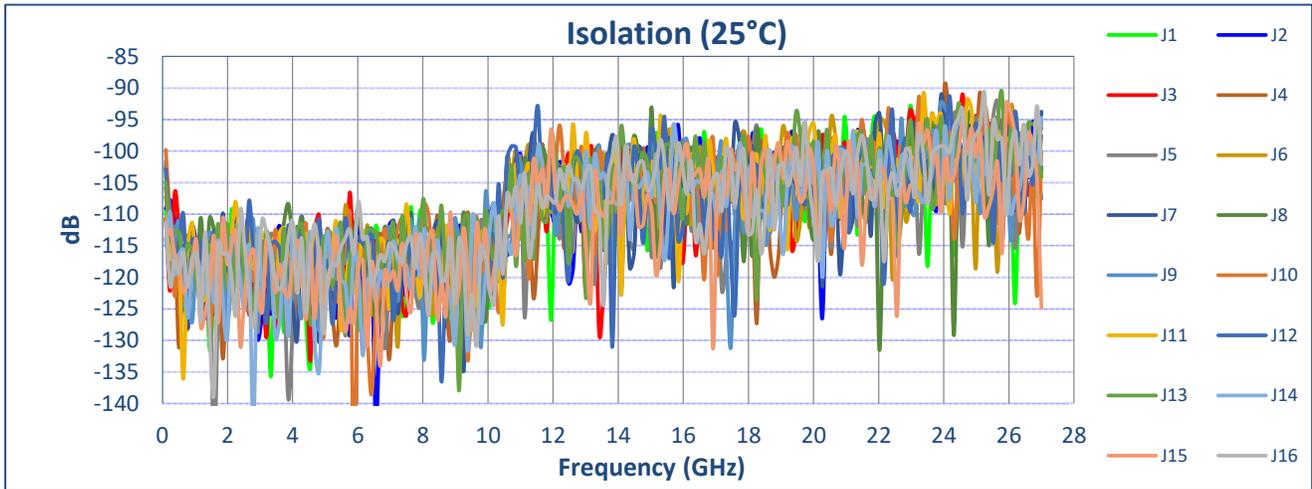
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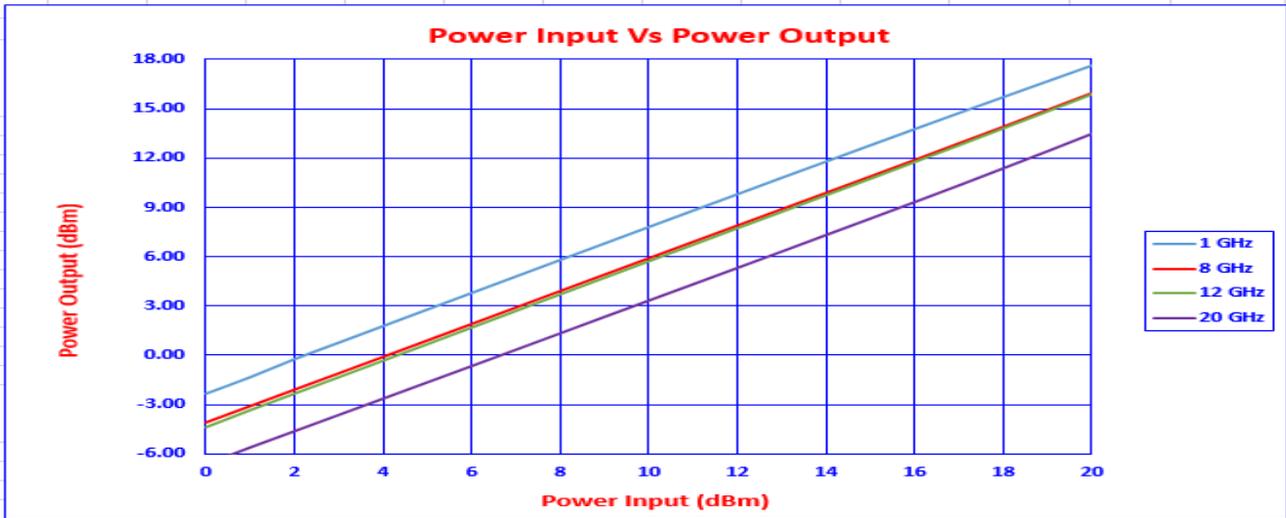
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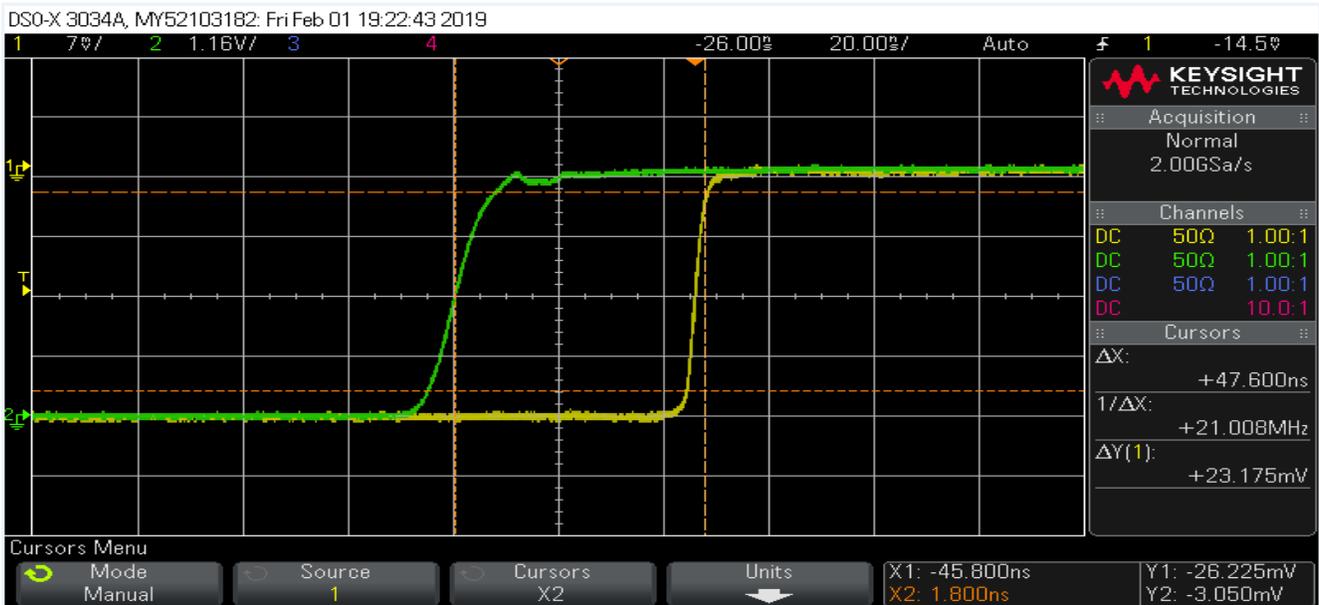


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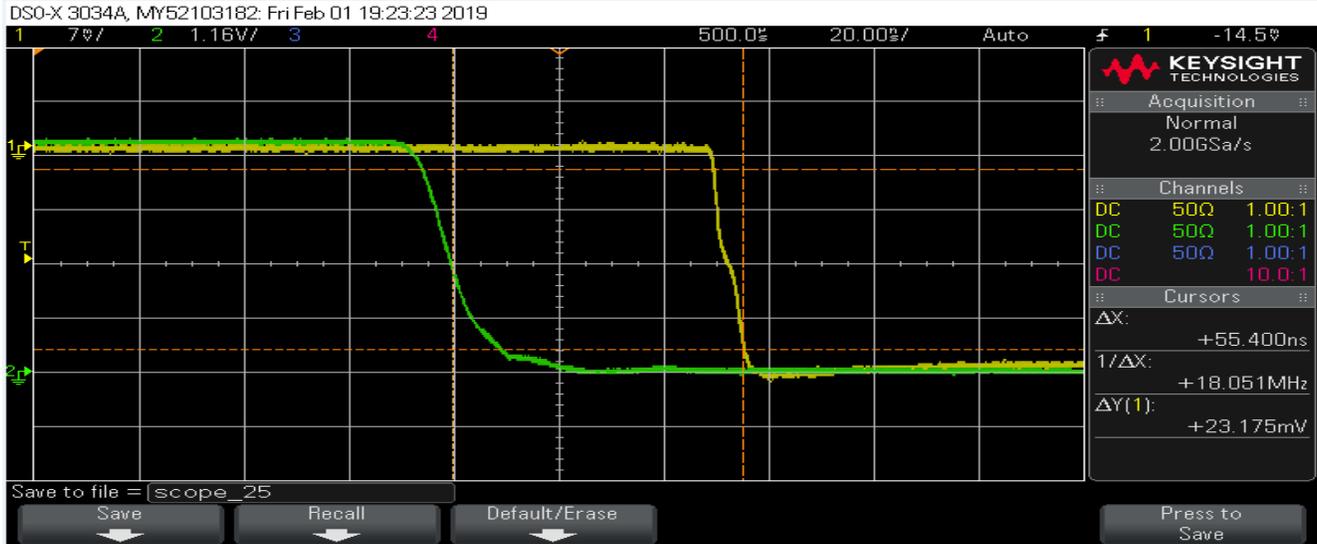
**Switching Speed ON (47.6 ns)
20ns per Div.**



Green Trace = TTL Signal
Yellow Trace = RF Signal

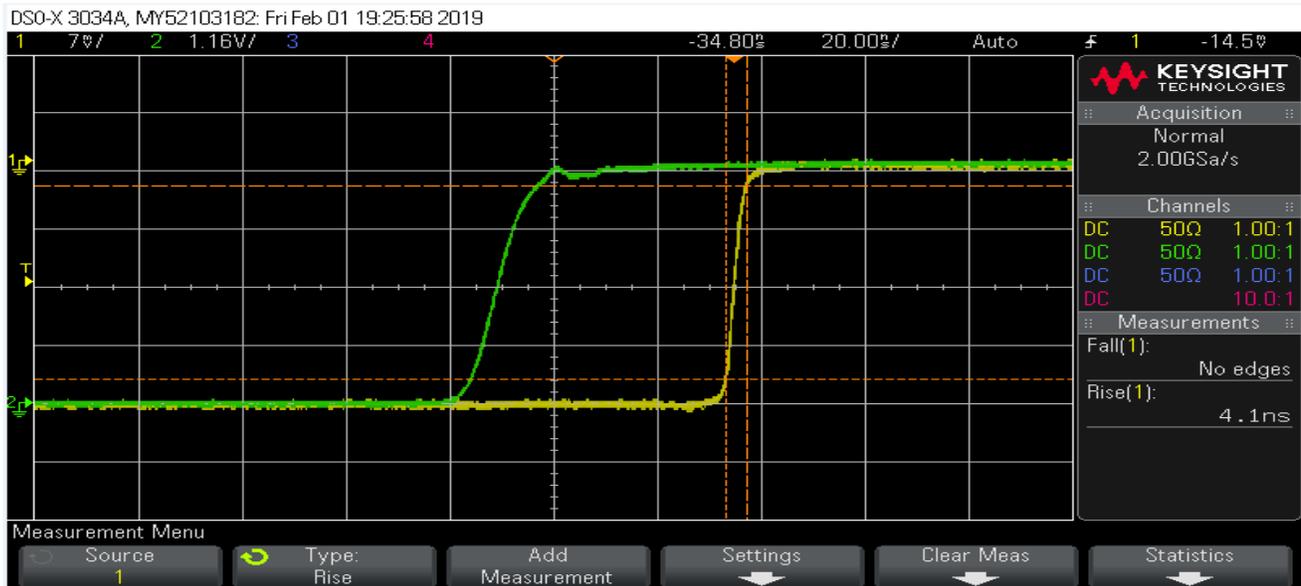
**TYPICAL CHARACTERISTICS
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**Switching Speed OFF (55.40 ns)
20ns per Div.**



Green Trace = TTL Signal
Yellow Trace = RF Signal

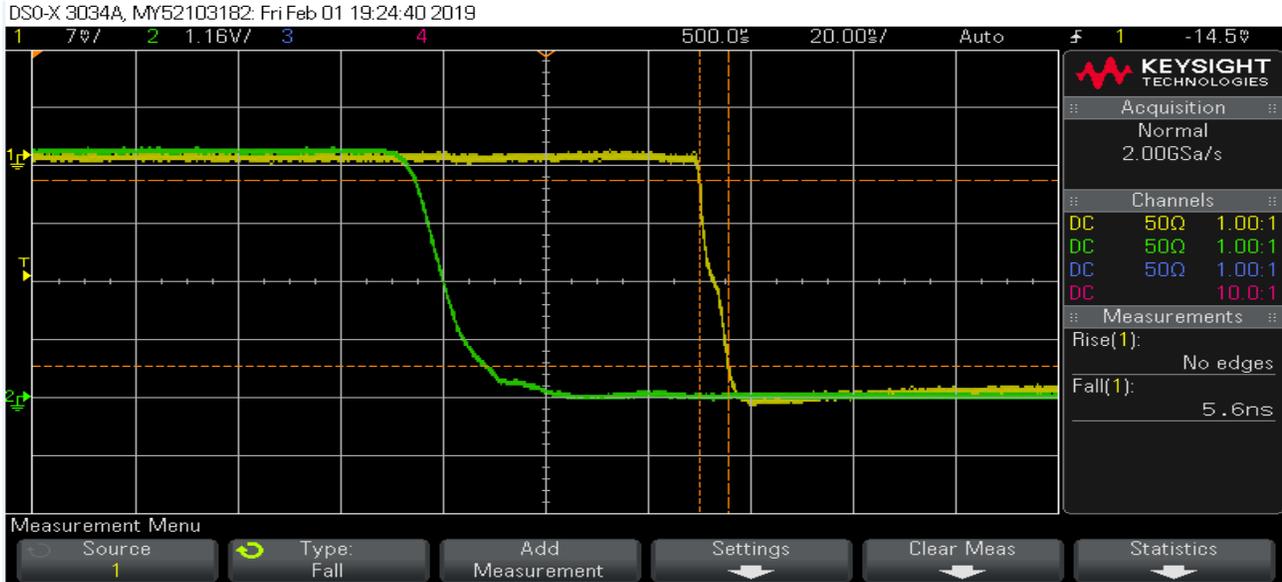
**Rise Time (4.1ns)
20ns per Div.**



Green Trace = TTL Signal
Yellow Trace = RF Signal

**TYPICAL CHARACTERISTICS
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Fall Time (5.6ns)
20ns per Div.



Green Trace = TTL Signal
Yellow Trace = RF Signal

Full Pulse – 100us per Div.

