

**TYPICAL CHARACTERISTICS
ON
P24T-10G31G-70-T-512-SFF-DEC -ROHS**

PMI MODEL NUMBER P24T-10G31G-70-T-512-SFF-DEC-ROHS IS A HIGH SPEED, SINGLE POLE, TWENTY-FOUR THROW, ABSORPTIVE SWITCH CAPABLE OF SWITCHING WITHIN 100 ns. THE FREQUENCY RANGE IS 10.0 GHz TO 31.0 GHz AND THIS SWITCH HAS OVER 70 dB OF ISOLATION. THIS PRODUCT IS ROHS AND REACH COMPLIANT.



**November 21, 2023
Designed By:
Michael Hanken**

**Tested and Reported By:
Michael Hanken**

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PRODUCT FEATURE

DESCRIPTION:

PMI MODEL NUMBER P24T-10G31G-70-T-512-SFF-DEC-ROHS IS A HIGH SPEED, SINGLE POLE, TWENTY-FOUR THROW, ABSORPTIVE SWITCH CAPABLE OF SWITCHING WITHIN 100ns. THE FREQUENCY RANGE IS 10.0 GHz TO 31.0 GHz AND THIS SWITCH HAS OVER 70 dB OF ISOLATION. THIS PRODUCT IS ROHS AND REACH COMPLIANT.

SPECIFICATIONS:

- FREQUENCY RANGE: 10.0 TO 31.0 GHz
- ISOLATION: 70 dB MIN
- INSERTION LOSS: 12 dB typical, 14 dB MAX
- V SWR (INPUT): 2.0:1 MAX
- OPERATING POWER: +23 dBm CW
- SWITCHING SPEED: 100 ns MAX
- DC VOLTAGE AND CURRENT: +5 V @ 1200 mA
-5 V @ 250 mA
- CONNECTORS: 2.92 mm (F), REMOVABLE
- FINISH: PAINTED BLUE
- SIZE: 12.07" X 3.31" X 0.65"

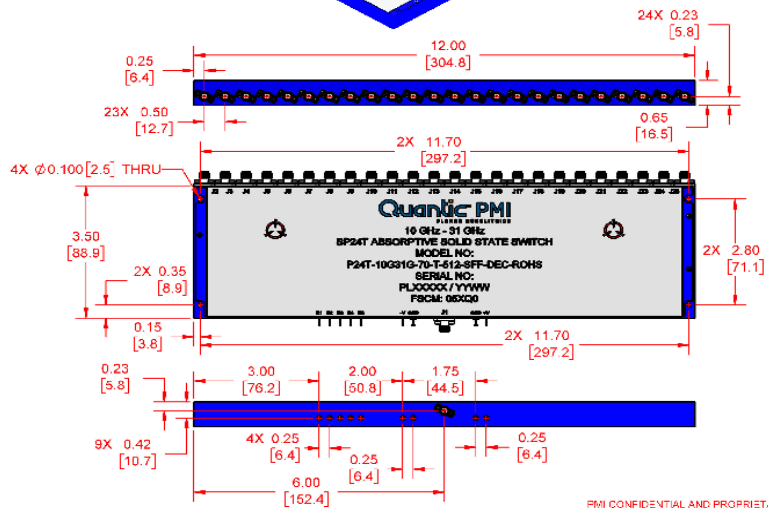
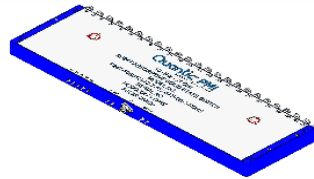
LOGIC TABLE
5 BIT TTL DECODER

E1	E2	E3	E4	E5	FUNCTION
0	0	0	0	0	J1-J2 "LOW LOSS"
0	0	0	0	1	J1-J3 "LOW LOSS"
0	0	0	1	0	J1-J4 "LOW LOSS"
0	0	0	1	1	J1-J5 "LOW LOSS"
0	0	1	0	0	J1-J6 "LOW LOSS"
0	0	1	0	1	J1-J7 "LOW LOSS"
0	0	1	1	0	J1-J8 "LOW LOSS"
0	0	1	1	1	J1-J9 "LOW LOSS"
0	1	0	0	0	J1-J10 "LOW LOSS"
0	1	0	0	1	J1-J11 "LOW LOSS"
0	1	0	1	0	J1-J12 "LOW LOSS"
0	1	0	1	1	J1-J13 "LOW LOSS"
0	1	1	0	0	J1-J14 "LOW LOSS"
0	1	1	0	1	J1-J15 "LOW LOSS"
0	1	1	1	0	J1-J16 "LOW LOSS"
0	1	1	1	1	J1-J17 "LOW LOSS"
1	0	0	0	0	J1-J18 "LOW LOSS"
1	0	0	0	1	J1-J19 "LOW LOSS"
1	0	0	1	0	J1-J20 "LOW LOSS"
1	0	0	1	1	J1-J21 "LOW LOSS"
1	0	1	0	0	J1-J22 "LOW LOSS"
1	0	1	0	1	J1-J23 "LOW LOSS"
1	0	1	1	0	J1-J24 "LOW LOSS"
1	0	1	1	1	J1-J25 "LOW LOSS"

ENVIRONMENTAL RATINGS:

- TEMPERATURE: -55°C TO +95°C (OPERATING)
-55°C TO +125°C (STORAGE)
- HUMIDITY: MIL-STD-202F, METHOD 103B COND. B
- SHOCK: MIL-STD-202F, METHOD 213B COND. B
- VIBRATION: MIL-STD-202F, METHOD 204D COND. B
- ALTITUDE: MIL-STD-202F, METHOD 105C COND. B
- TEMPERATURE CYCLE: MIL-STD-202F, METHOD 107

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



REV	DATE	DESCRIPTION	BY	CHKD
1		ORIGINAL RELEASE		

PMI CONFIDENTIAL AND PROPRIETARY

Quantic PMI
PLANAR MONOLITHICS

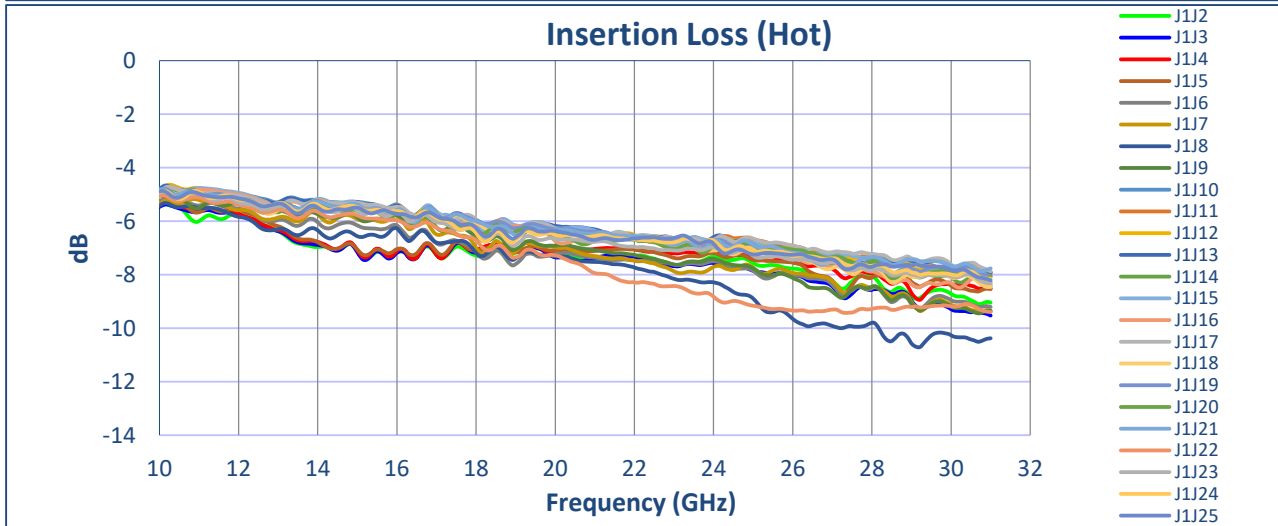
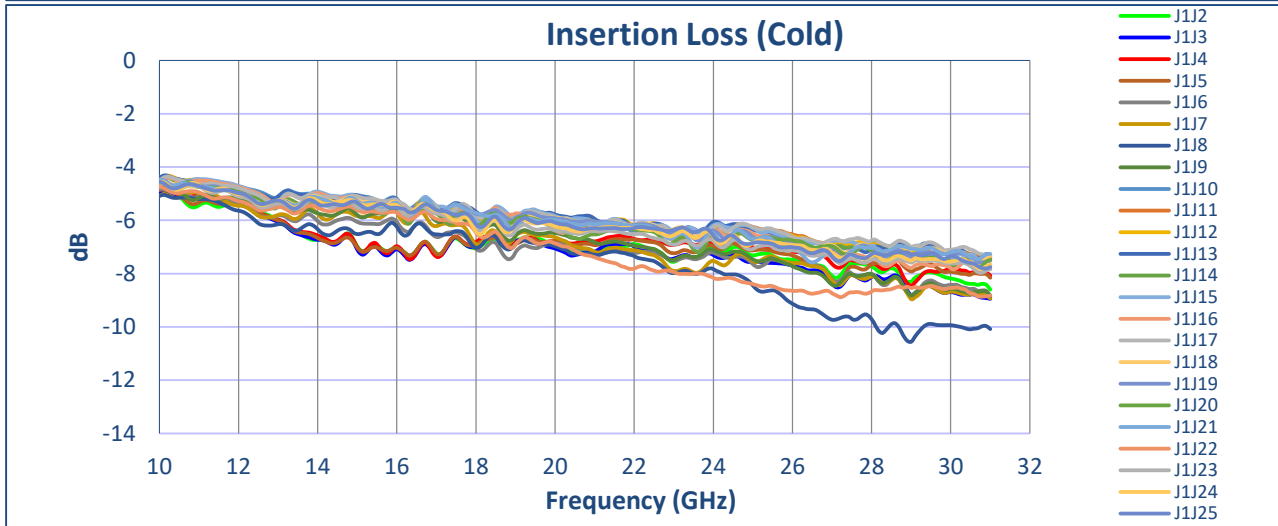
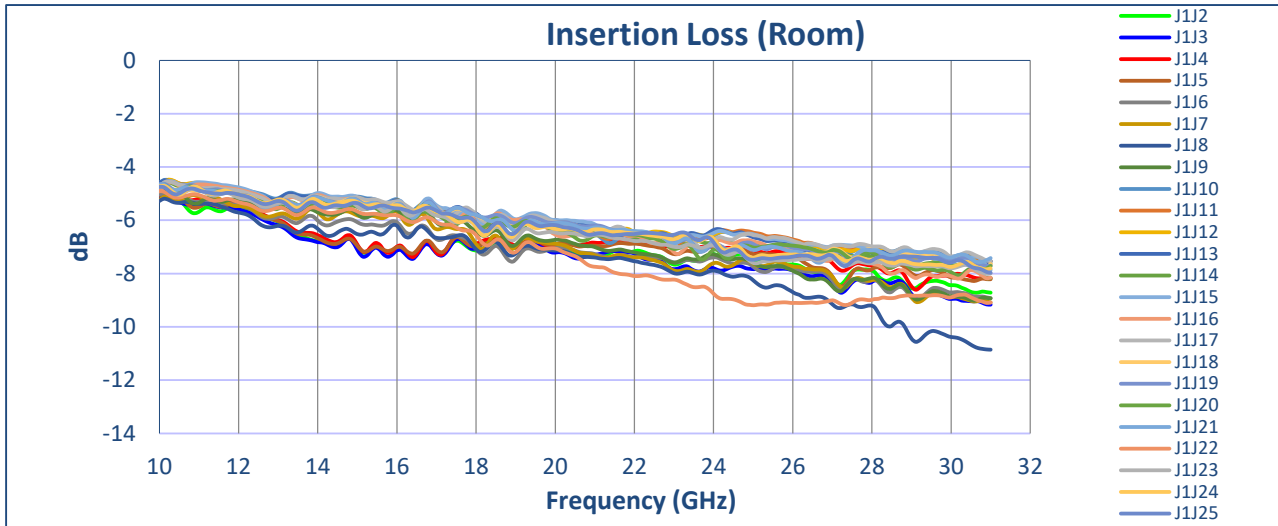
APPROVAL	DATE	FILE	OUTLINE
DESIGNED BY M. HANKEN	1/10/04	P24T-10G31G-70-T-512-SFF-DEC-ROHS	REV
DESIGNED BY		D. CEXQO	27045520
DATE			A1
SCALE: 1:2		SHEET 1 OF 1	

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TEST DATA

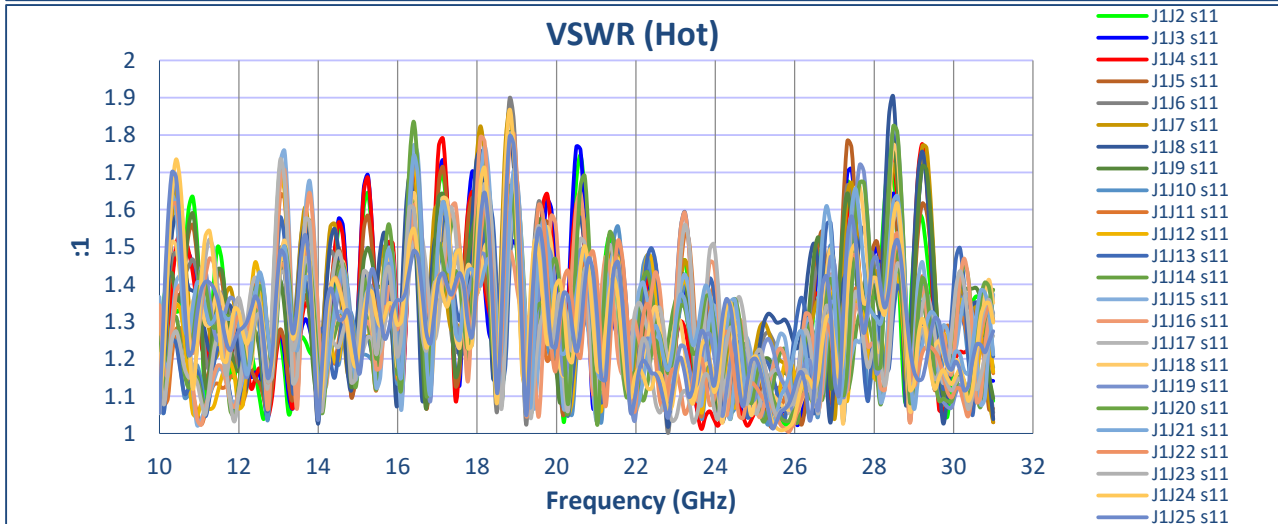
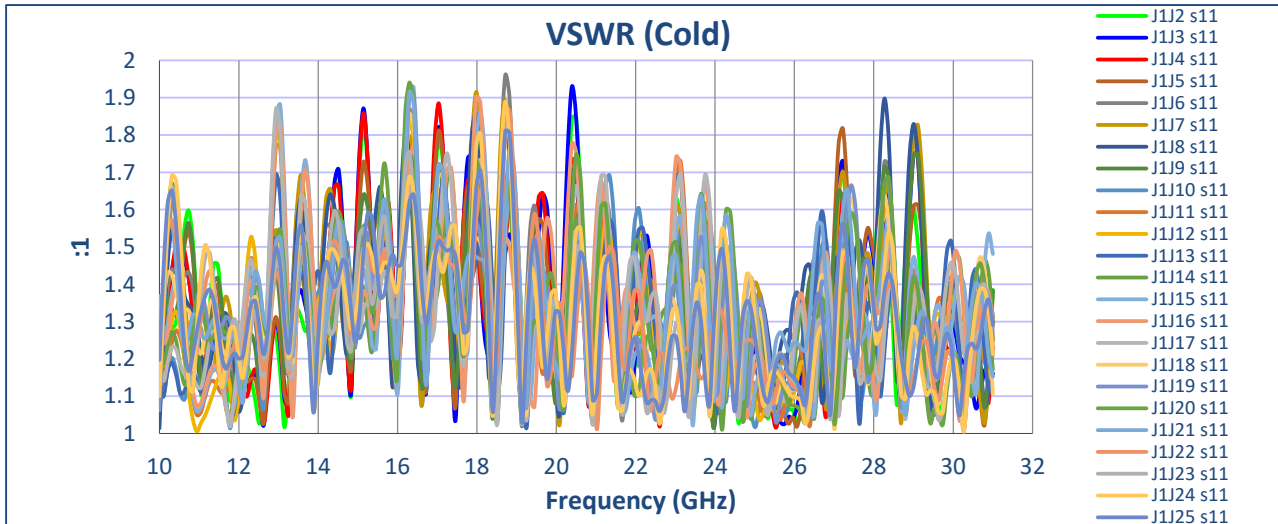
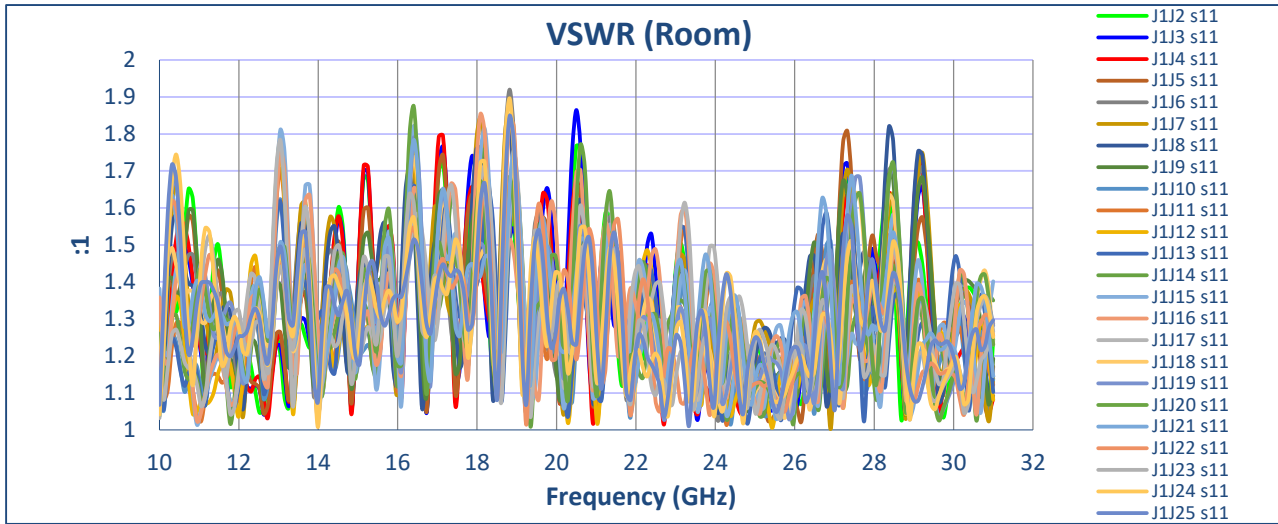
TEST ITEM	PARAMETERS	SPECIFIED VALUE	TEST RESULTS		
			25°C	-40°C	85°C
1	Frequency Range	10 GHz to 31 GHz	10 GHz to 31 GHz	10 GHz to 31 GHz	10 GHz to 31 GHz
2	Isolation	70 dB Min.	70.4 dB	77.9 dB	71.8 dB
3	Insertion Loss	14 dB Max. 12 dB Goal	10.86 dB	10.55 dB	10.71 dB
4	VSWR: In/Out	2:1 Max.	1.92:1 In 1.94:1 Out	1.96:1 In 1.98:1 Out	1.9:1 In 1.95:1 Out
5	Operating Power CW	23 dBm Max	23	23	23
6	Switching Speed Max	100 ns Max.	J3 RF 54 nS J18 RF 100 nS	J3 RF 54 nS J18 RF 100 nS	J3 RF 54 nS J18 RF 100 nS
7	Power Supply	5 V @ 1200 mA -5 V @ 250 mA	5 V @ 655 mA -5 V @ 160 mA	5 V @ 647 mA -5 V @ 155 mA	5 V @ 662 mA -5 V @ 165 mA
8	Control Signal	5 BIT DECODED TTL LOGIC	Pass	Pass	Pass

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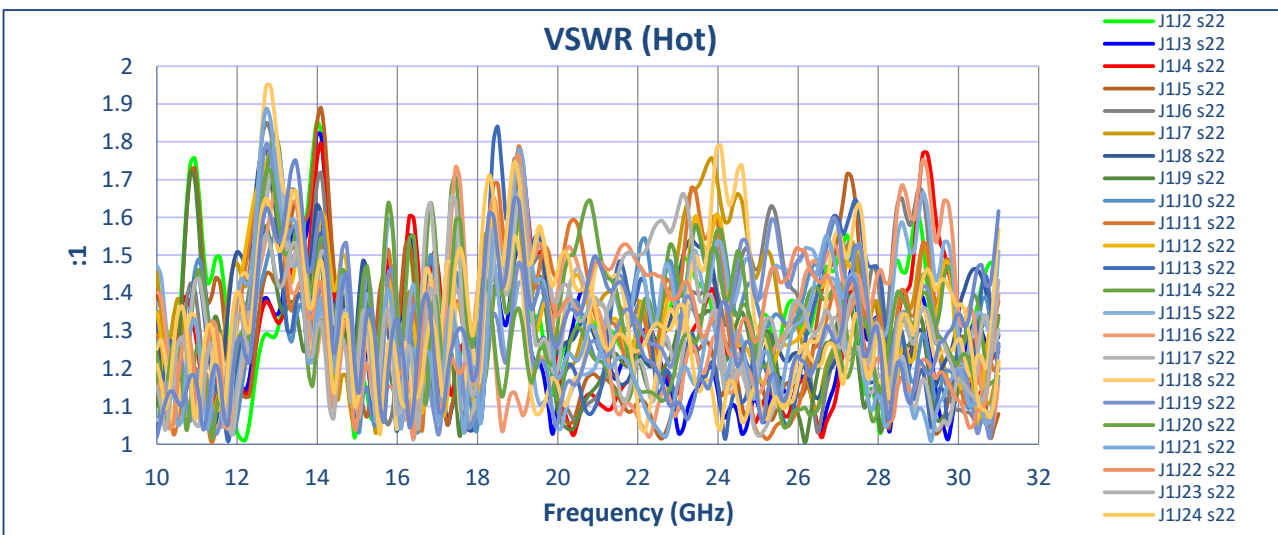
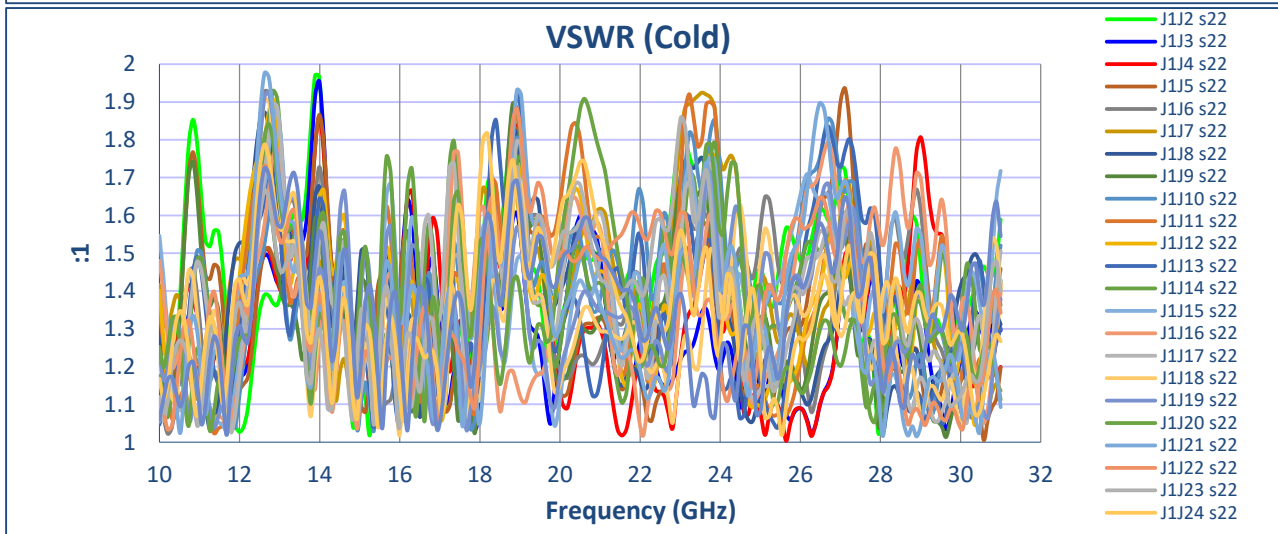
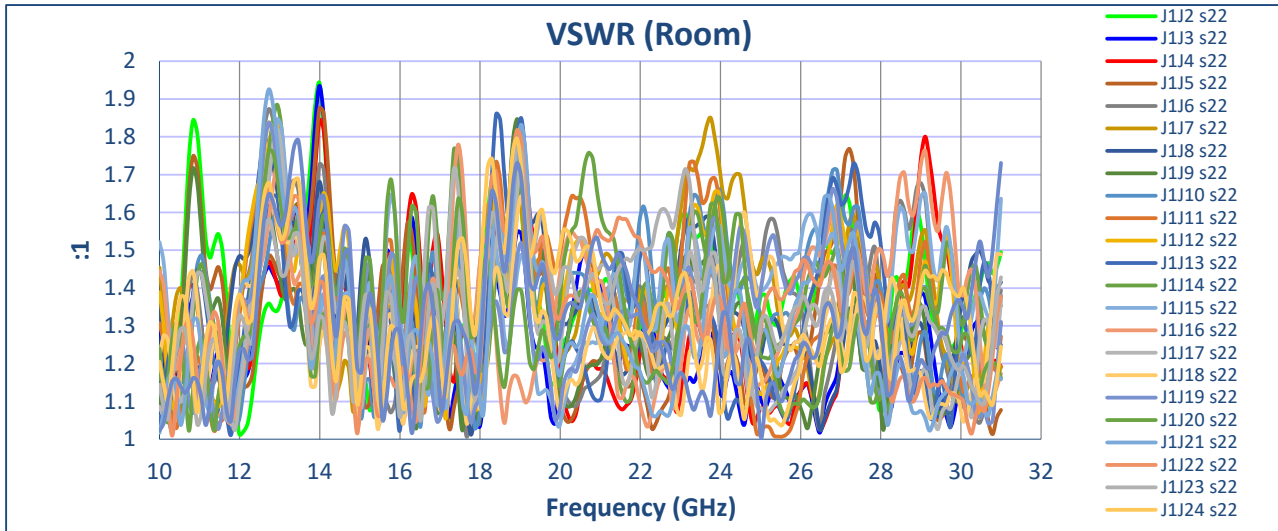
7309-A Grove Road Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731
Email: sales@quanticpmi.com

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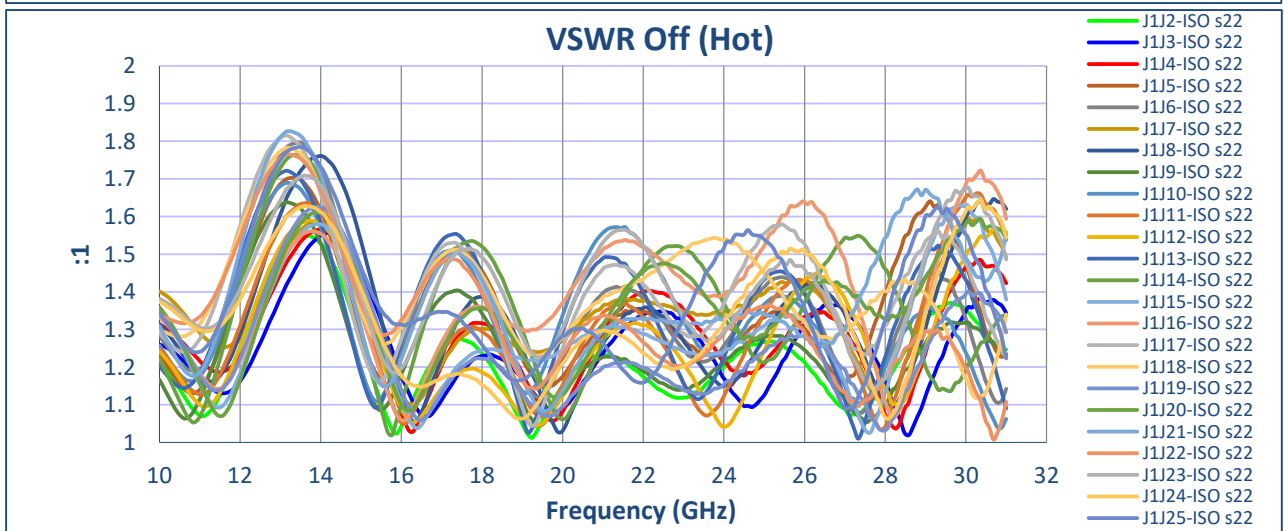
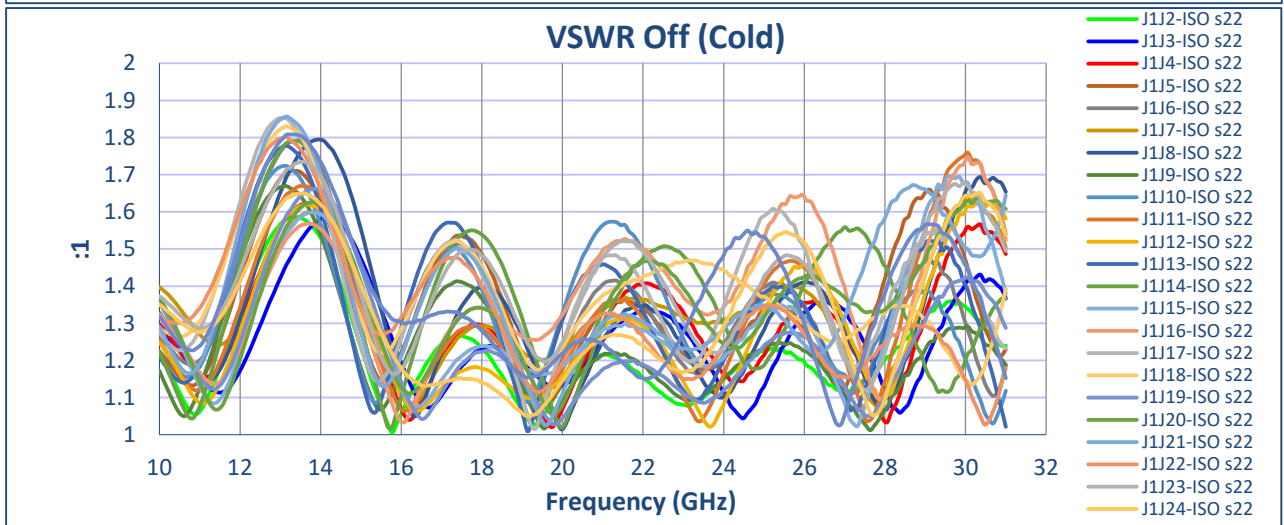
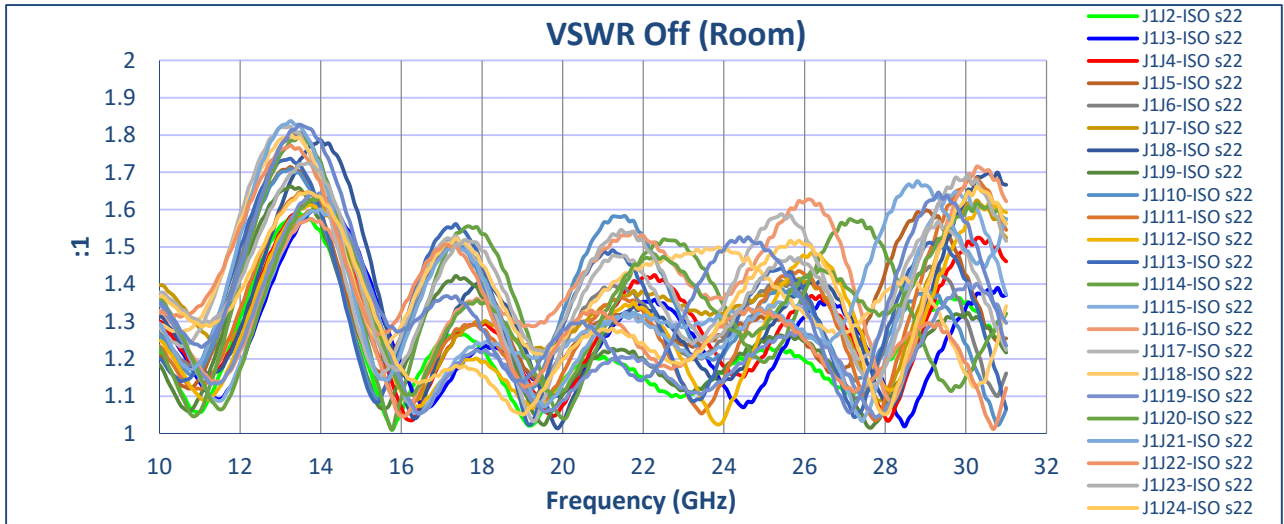
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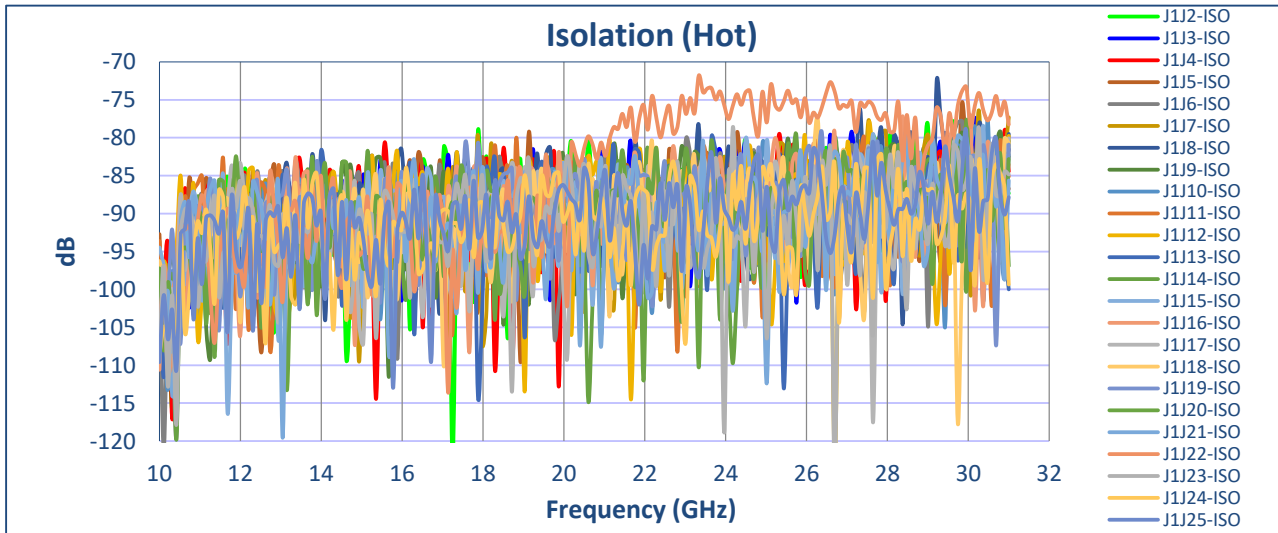
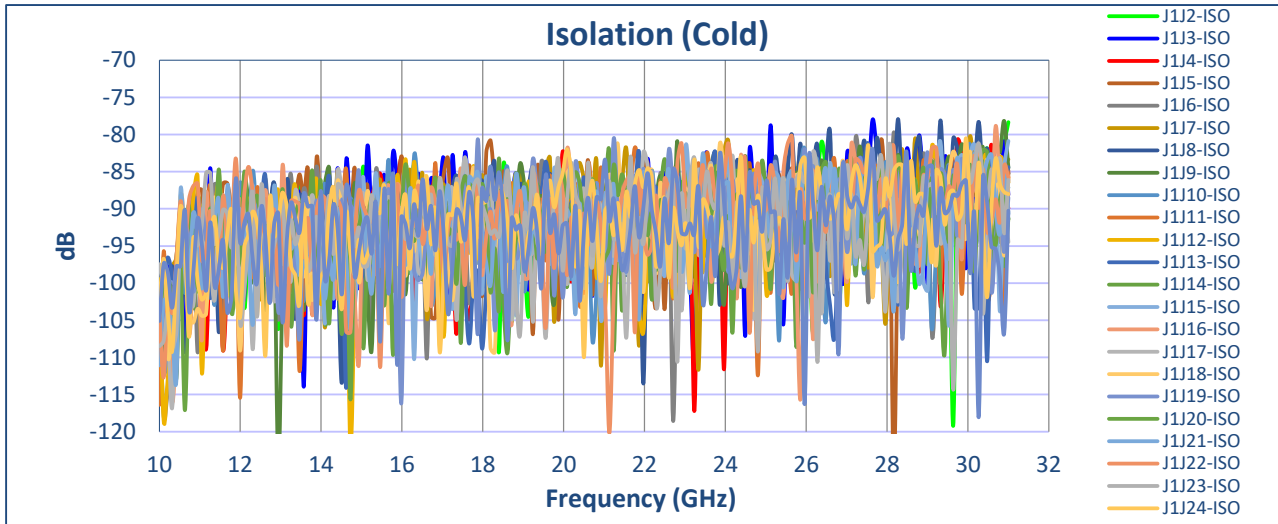
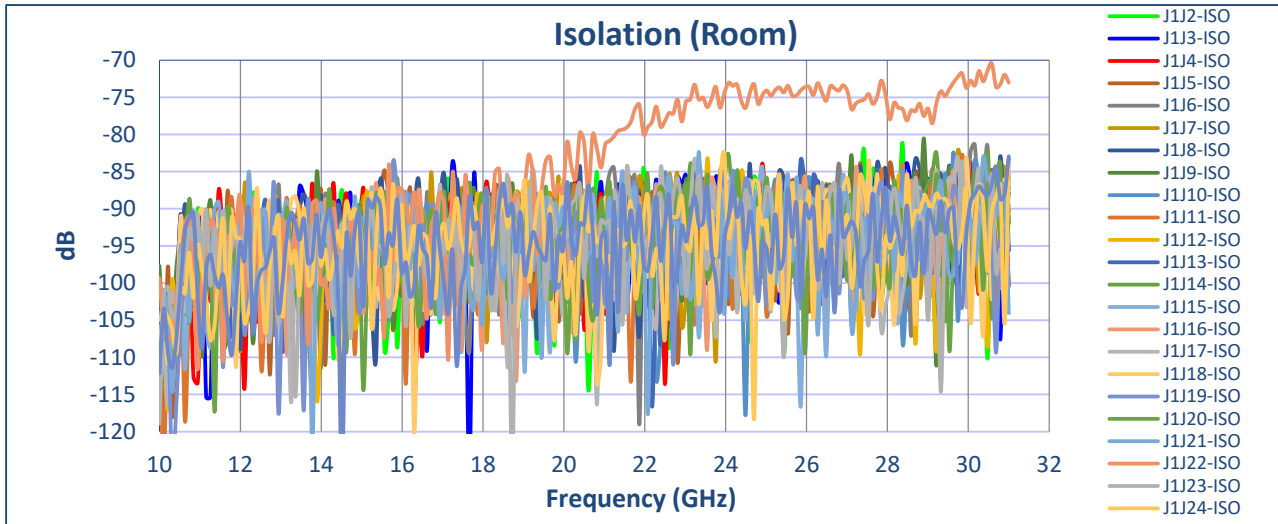
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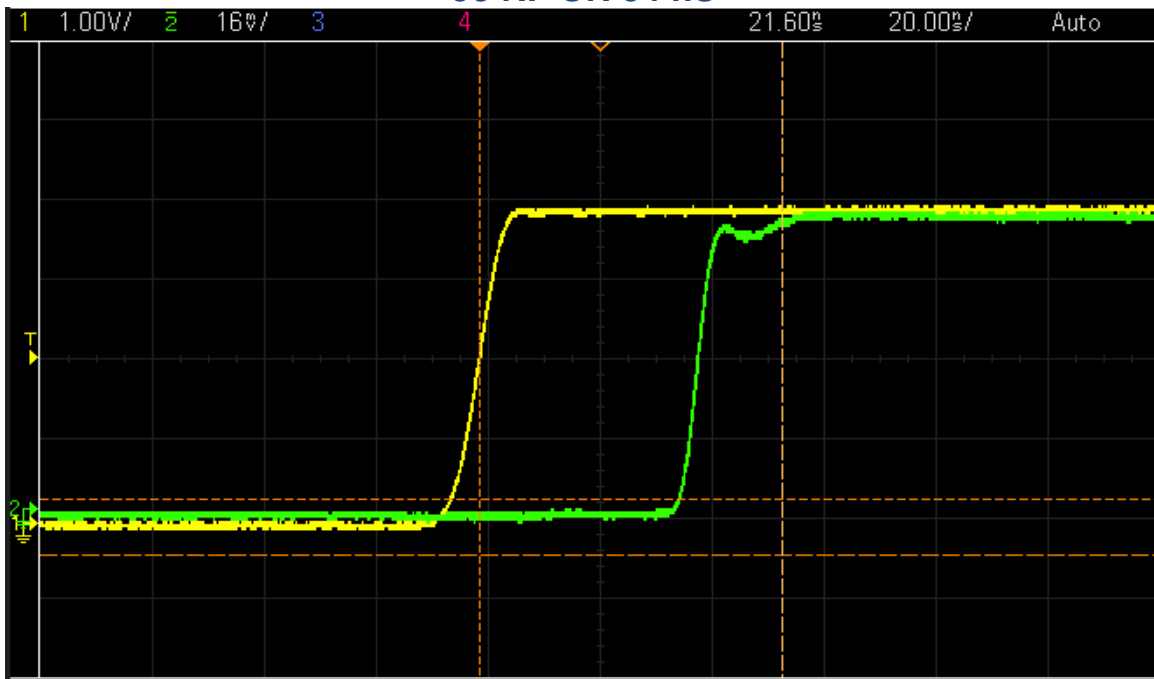
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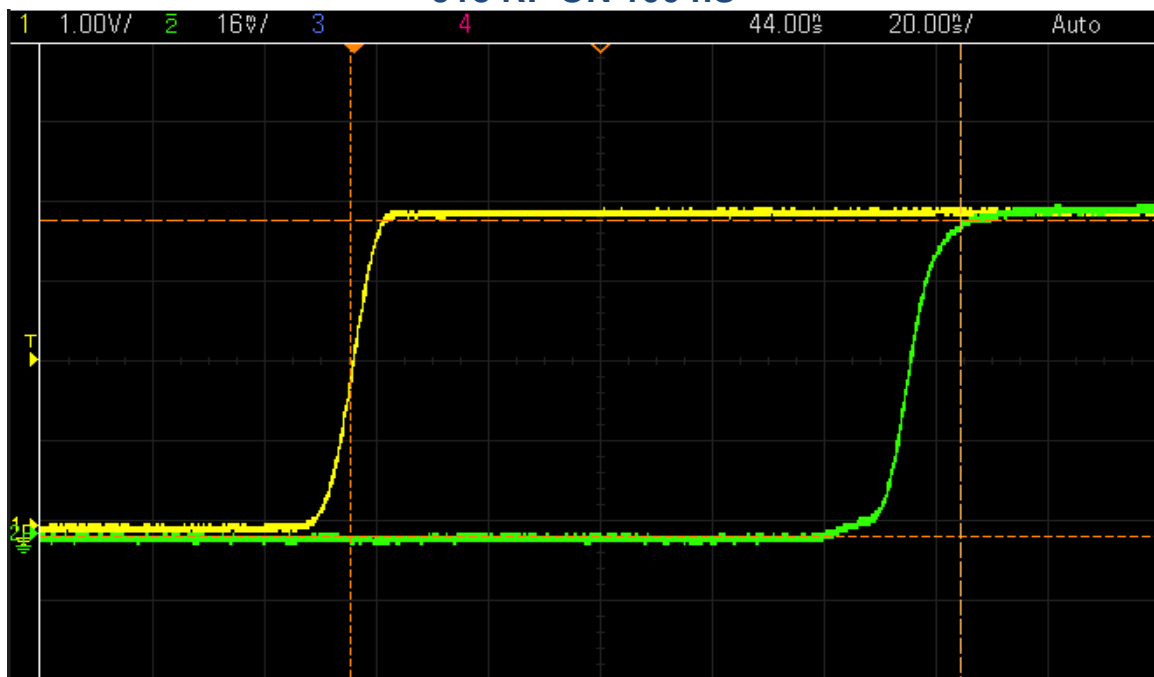
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J3 RF ON 54 nS



J18 RF ON 100 nS



J3 RF OFF 34 nS

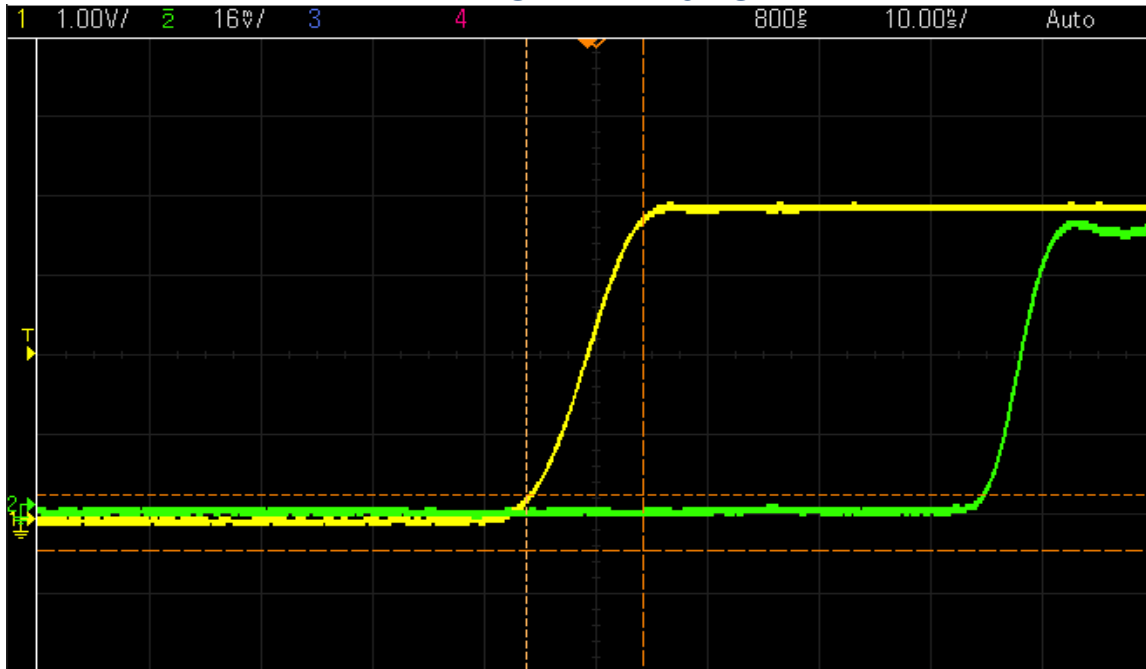


J18 RF OFF 34 nS



7309-A Grove Road Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731
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RF RISE TIME 10 nS



RF FALL TIME 10 nS



