

TYPICAL CHARACTERISTICS
ON
P8T-0D418-75-T-SFF

PMI MODEL NUMBER P8T-0D418-75-T-SFF IS A SINGLE POLE, EIGHT THROW, ABSORPTIVE SWITCH THAT OPERATES OVER THE FREQUENCY RANGE OF 0.4 TO 18.0 GHz. IT HAS A MINIMUM ISOLATION OF 75 dB AND A MINIMUM RETURN LOSS OF -10 dB. THIS MODEL IS OUTFITTED WITH SMA FEMALE CONNECTORS.



Reported By Hugo Gonzales
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Date January 24 2025

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PRODUCT FEATURE**

DESCRIPTION:

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ZONE	REV	DESCRIPTION	DATE	APPROVED
A1		ORIGINAL RELEASE	01/03/03	
B1		ECN # 24-0158	02/02/04	

SPECIFICATIONS:

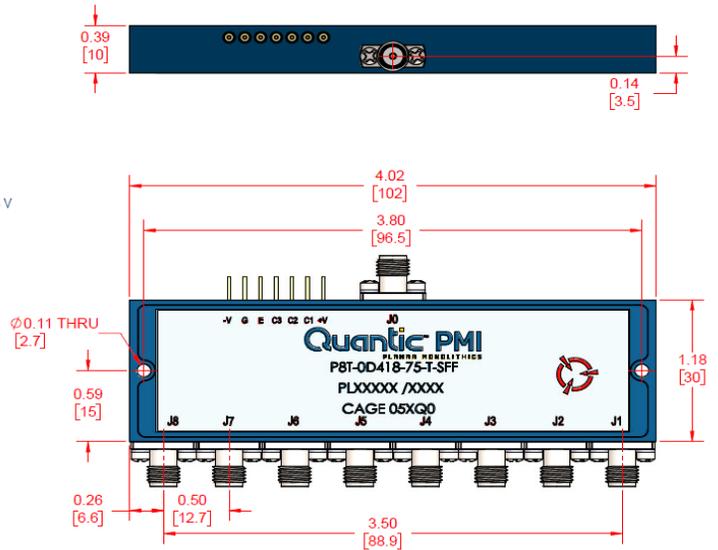
- FREQUENCY RANGE:..... 0.4 TO 18.0 GHz
- ISOLATION:..... 75 dB MIN
- INSERTION LOSS:..... 3.4 dB MAX @ 0.4 TO 10.0 GHz
5 dB MAX @ 10.0 TO 18.0 GHz
- RETURN LOSS (ALL PORTS ON OR OFF STATE):..... -10 dB MIN
- RISE/FALL TIME (10% TO 90% RF, 90% TO 10% RF):..... 50 ns MAX
- ON/OFF TIME (50% TTL TO 90% RF, 50% TTL TO 10% RF):..... 100 ns MAX
- RF POWER:..... 1W CW (SURVIVAL)
- POWER SUPPLY:..... +5 V ± 0.25 V @ 250 mA MAX
-15 V ± 0.25 V @ 100 mA MAX
- CONTROL LOGIC:..... 3 BCD, 0 V < "0" < 0.8 V, 2.4 V < "1" < 5 V
- IMPEDANCE:..... 50 OHMS
- CONNECTORS:..... SMA FEMALE
- SEALING:..... EPOXY SEALING
- FINISH:..... PAINTED BLUE

C1	C2	C3	E	ON	OFF
DC	DC	DC	1	-	J0-J1, J2, J3, J4, J5, J6, J7, J8
0	0	0	0	J0-J1	J0-J2, J3, J4, J5, J6, J7, J8
0	0	1	0	J0-J2	J0-J1, J3, J4, J5, J6, J7, J8
0	1	0	0	J0-J3	J0-J1, J2, J4, J5, J6, J7, J8
0	1	1	0	J0-J4	J0-J1, J2, J3, J5, J6, J7, J8
1	0	0	0	J0-J5	J0-J1, J2, J3, J4, J6, J7, J8
1	0	1	0	J0-J6	J0-J1, J2, J3, J4, J5, J7, J8
1	1	0	0	J0-J7	J0-J1, J2, J3, J4, J5, J6, J8
1	1	1	0	J0-J8	J0-J1, J2, J3, J4, J5, J6, J7

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 204B 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



PMI CONFIDENTIAL AND PROPRIETARY

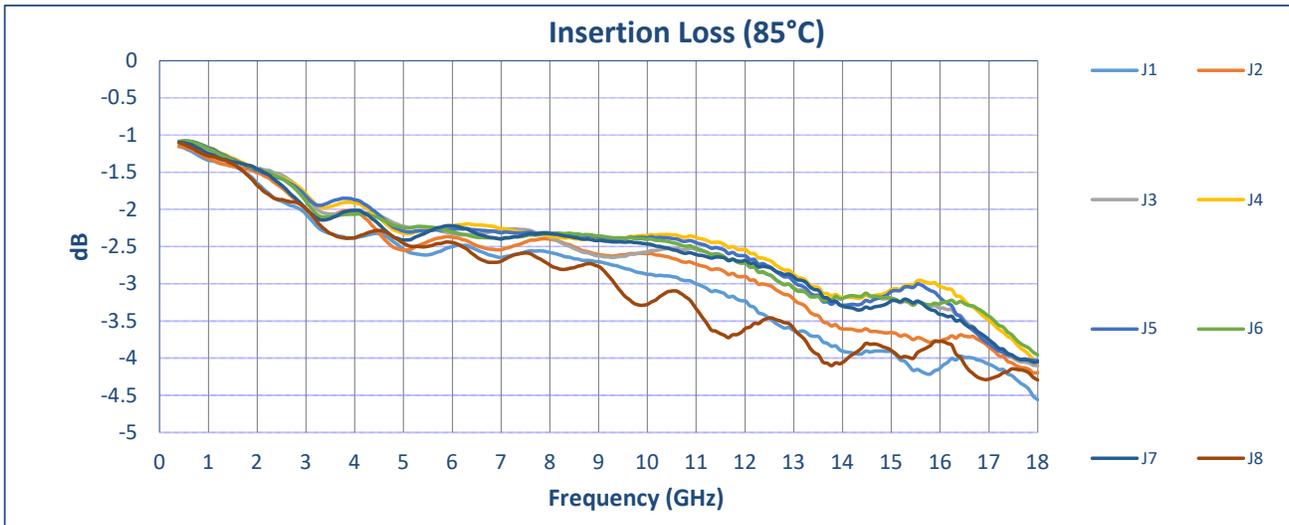
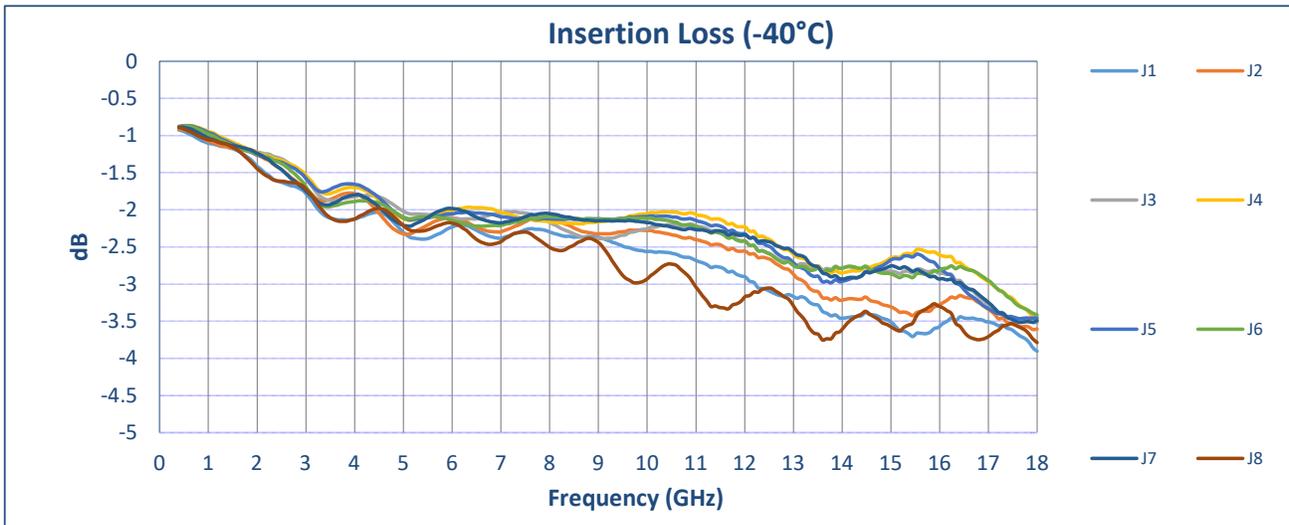
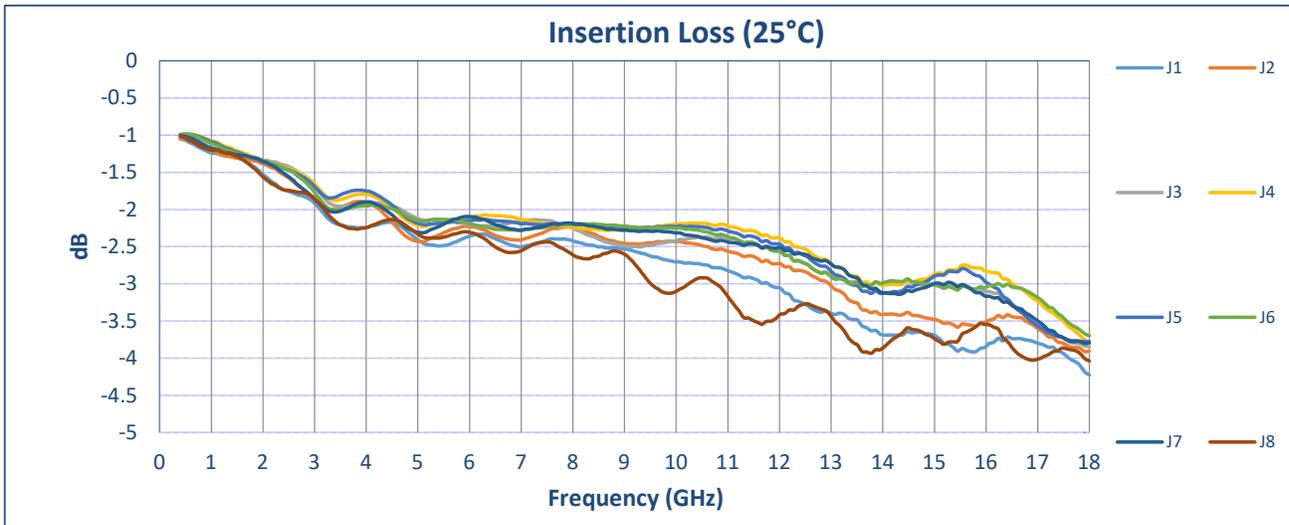
APPROVALS		DATE	TITLE	
DESIGNER	S AZHAR	01/03/03	OUTLINE	
TESTER			P8T-0D418-75-T-SFF	
MANUFACTURER			REV	B1
			PART NO.	27048780
			SCALE	5:1
			SHEET 1 OF 1	

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TEST DATA

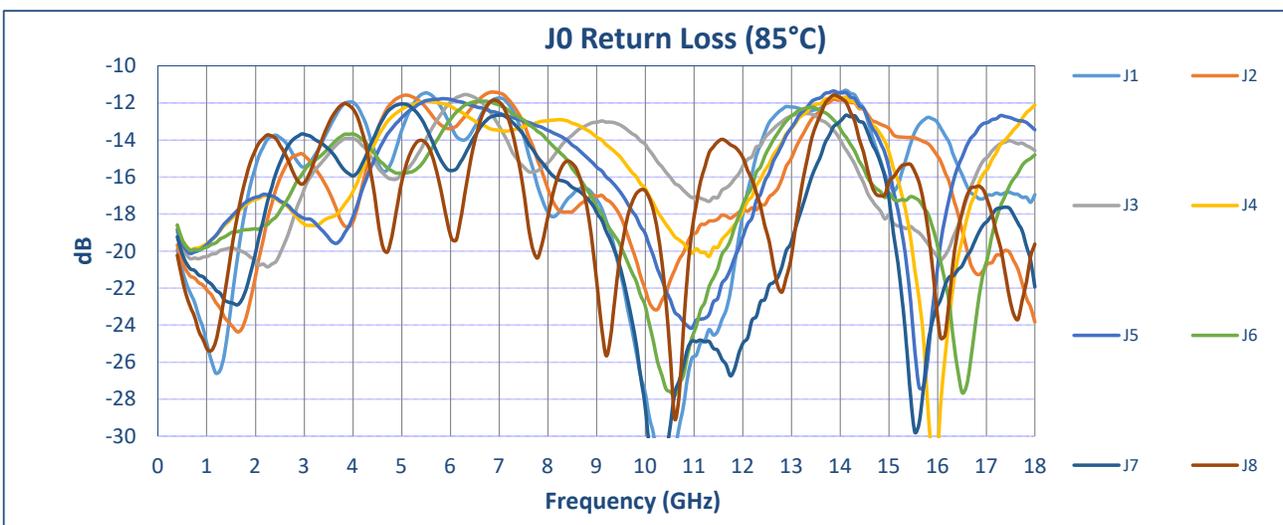
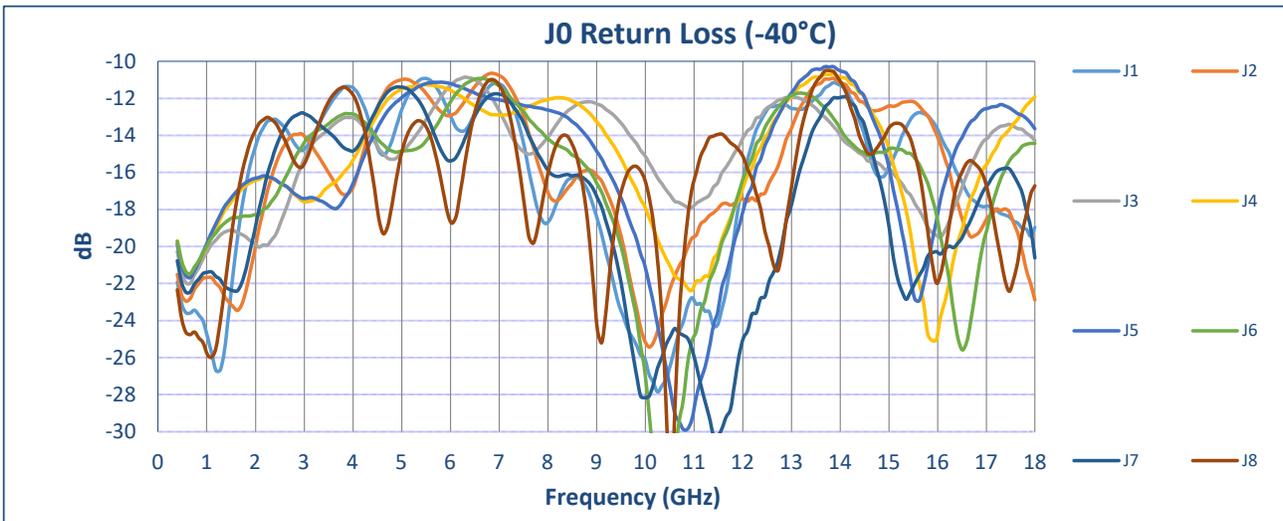
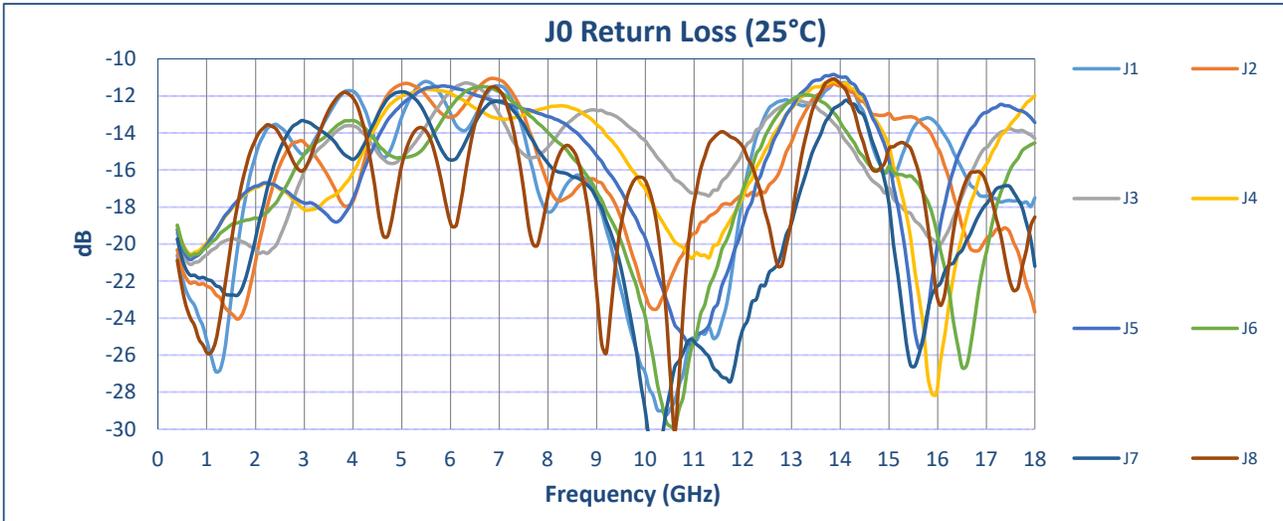
TEST ITEM	PARAMETERS	SPECIFIED VALUE	TEST RESULTS		
			25°C	-40°C	85°C
1	Frequency Range	0.4 GHz to 18 GHz	0.4 GHz to 18 GHz	0.4 GHz to 18 GHz	0.4 GHz to 18 GHz
2	Isolation	75 dB Min.	77.6 dB	77.9 dB	77.9 dB
3	Insertion Loss	3.4 dB Max., 0.4-10 GHz 5 dB Max., 10-18 GHz	3.13 dB 4.23 dB	2.98 dB 3.91 dB	3.29 dB 4.56 dB
4	Return Loss On/Off	-10 dB Min.	-10.83 dB J0 -11.37 dB J1-J8 -10.58 dB J1-J8 Off	-10.28 dB J0 -10.61 dB J1-J8 -10.01 dB J1-J8 Off	-11.31 dB J0 -11.56 dB J1-J8 -10.24 dB J1-J8 Off
5	Rise/Fall Time	50 ns Max. Rise 50 ns Max. Fall	9.6 ns Rise 12.4 ns Fall		
6	Switching Speed (On/ Off)	100 ns Max.	78.2 ns On 50.6 ns Off		
7	Survival Power CW	1 Watt Max.	1 Watt		
8	Power Supply	5 V @ 250 mA Max. -15 V @ 100 mA Max.	5 V @ 162 mA -15 V @ 67 mA	5 V @ 163 mA -15 V @ 66 mA	5 V @ 161 mA -15 V @ 67 mA

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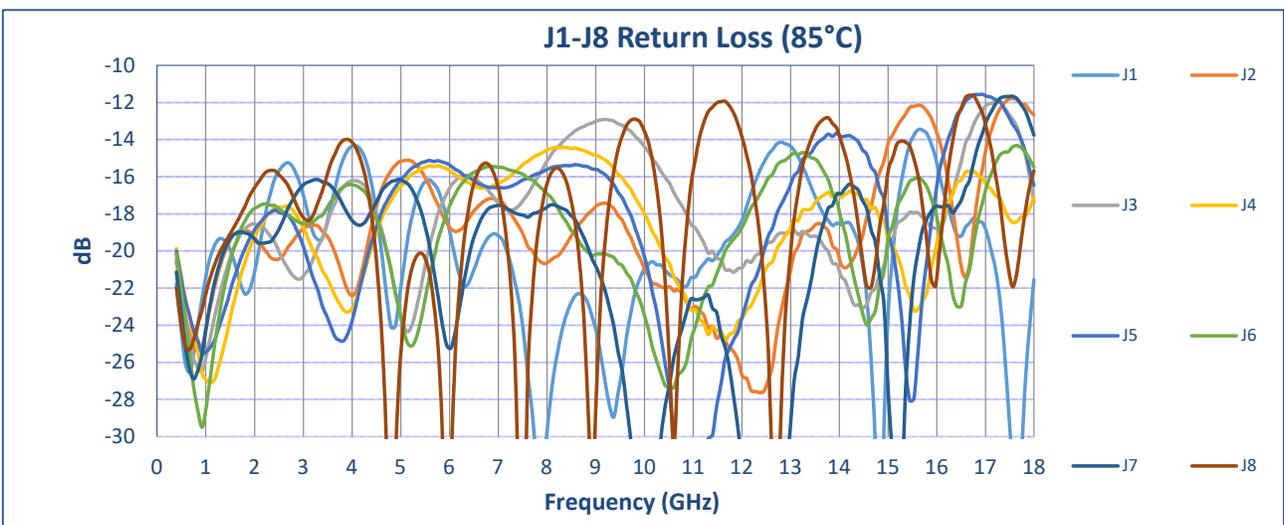
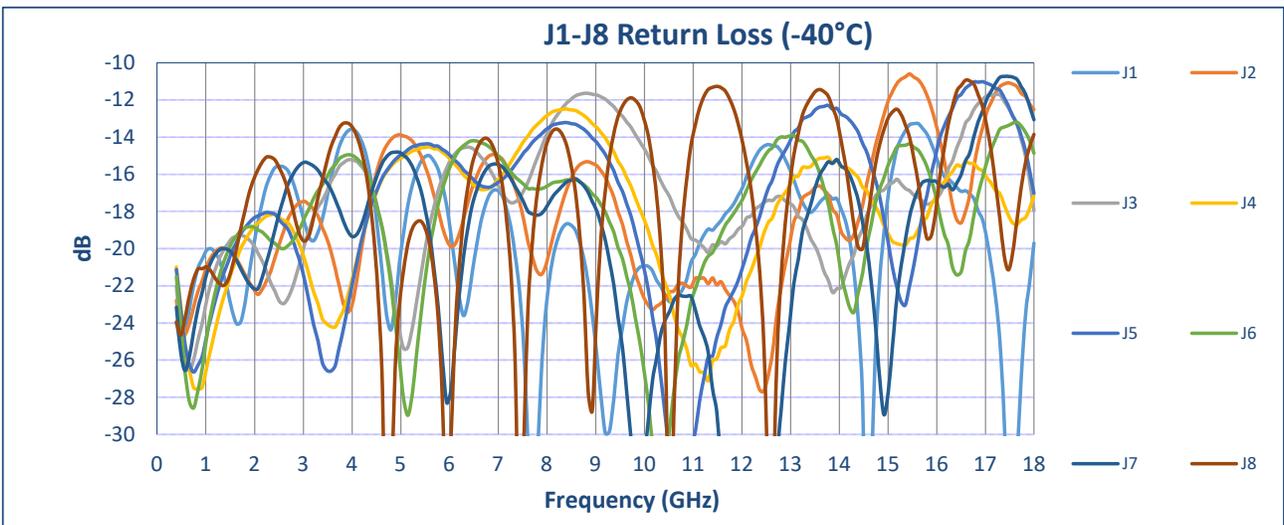
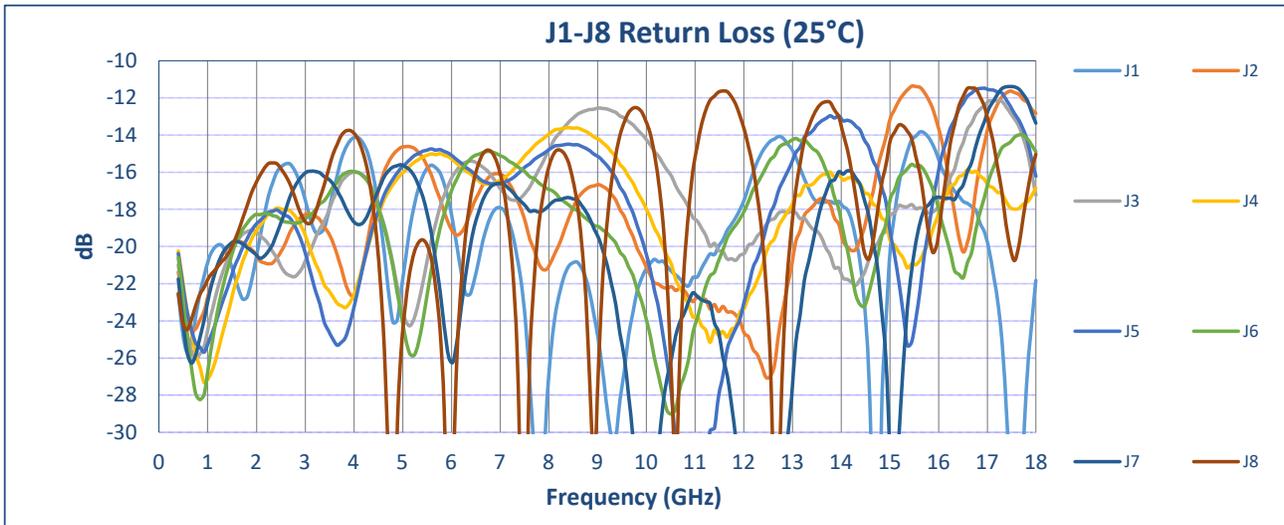
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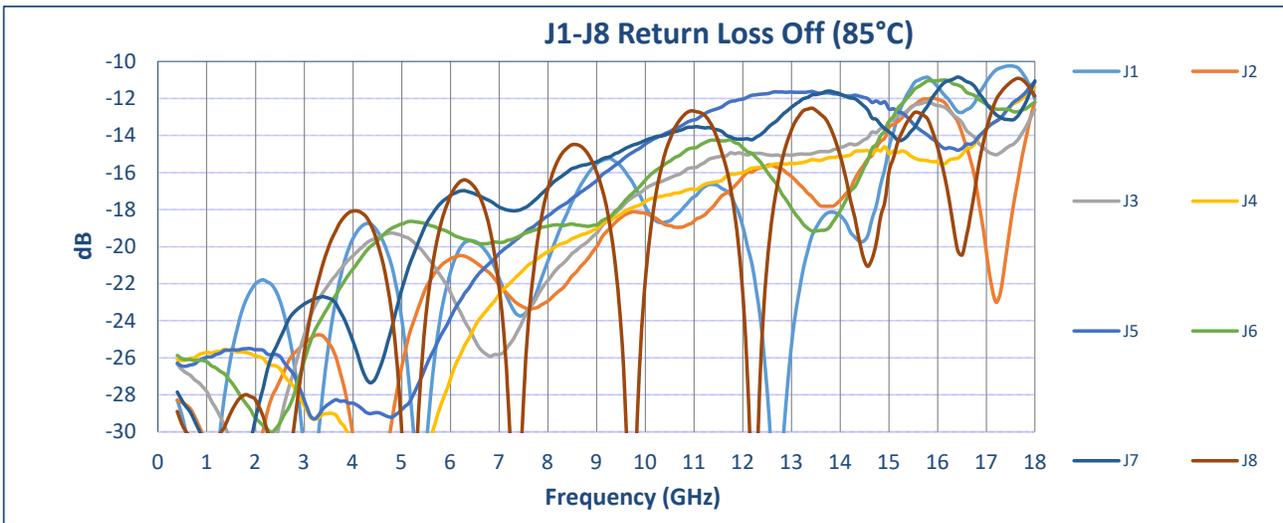
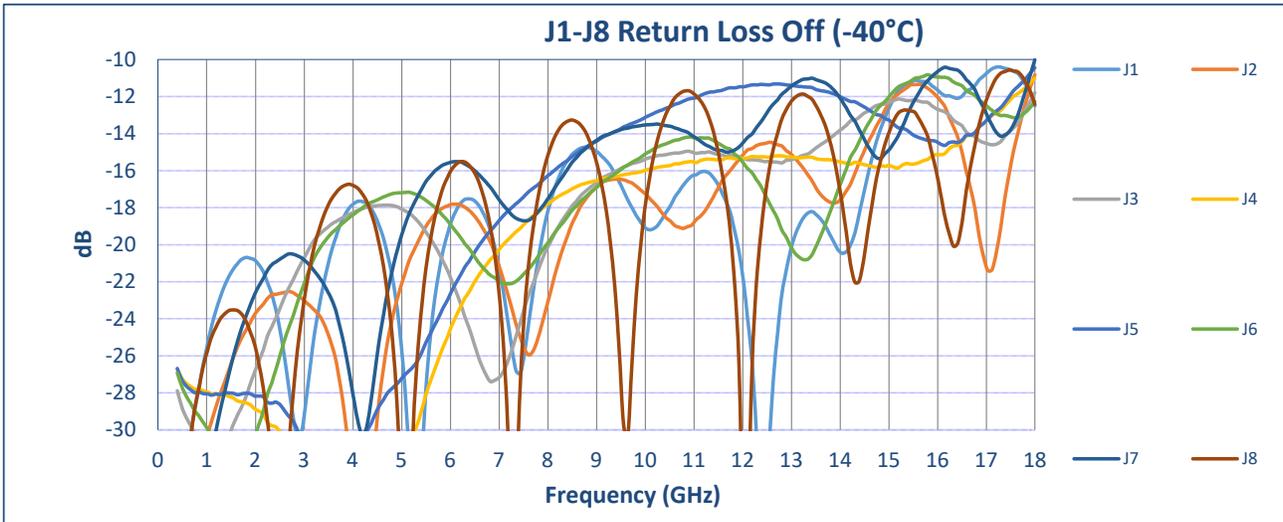
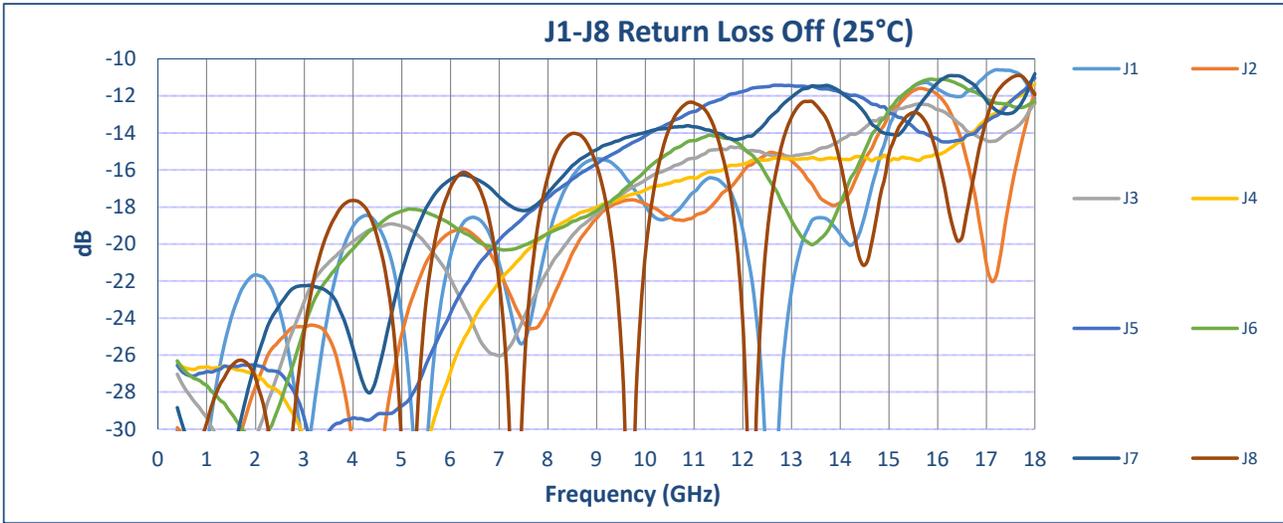
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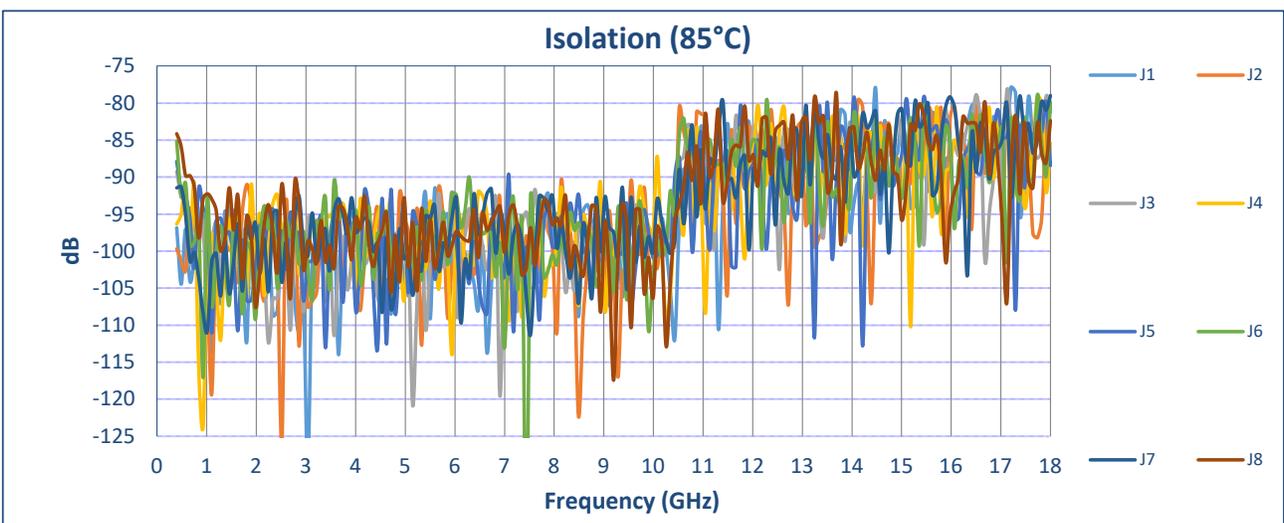
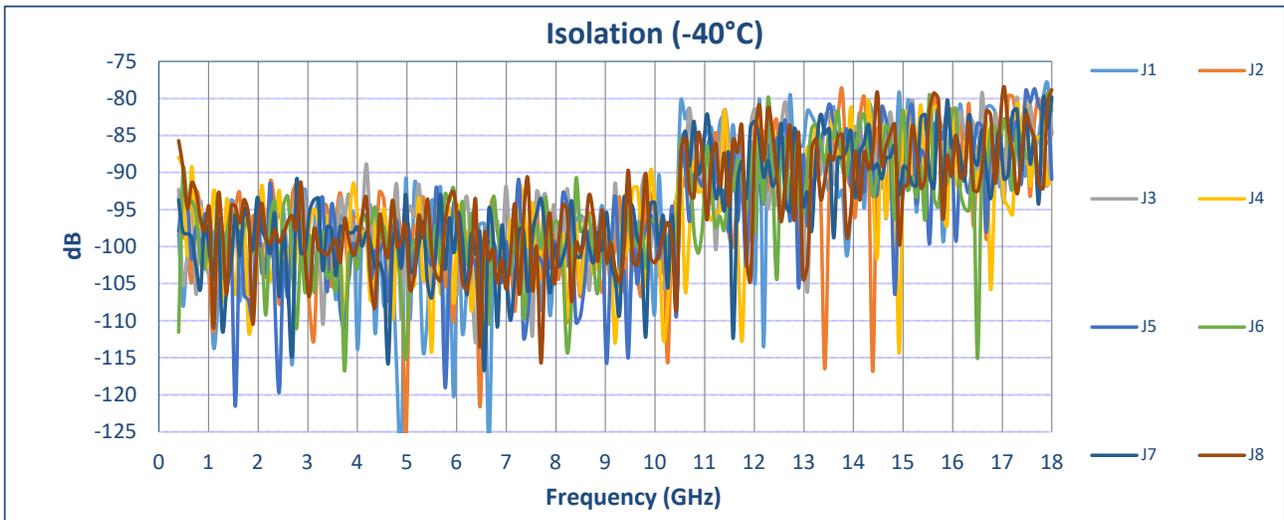
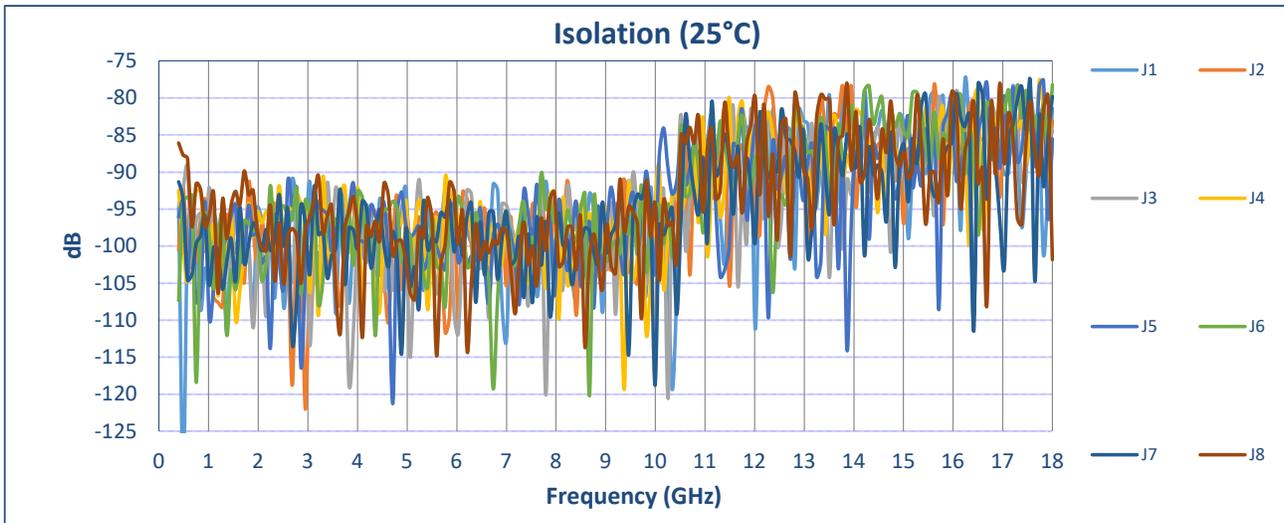
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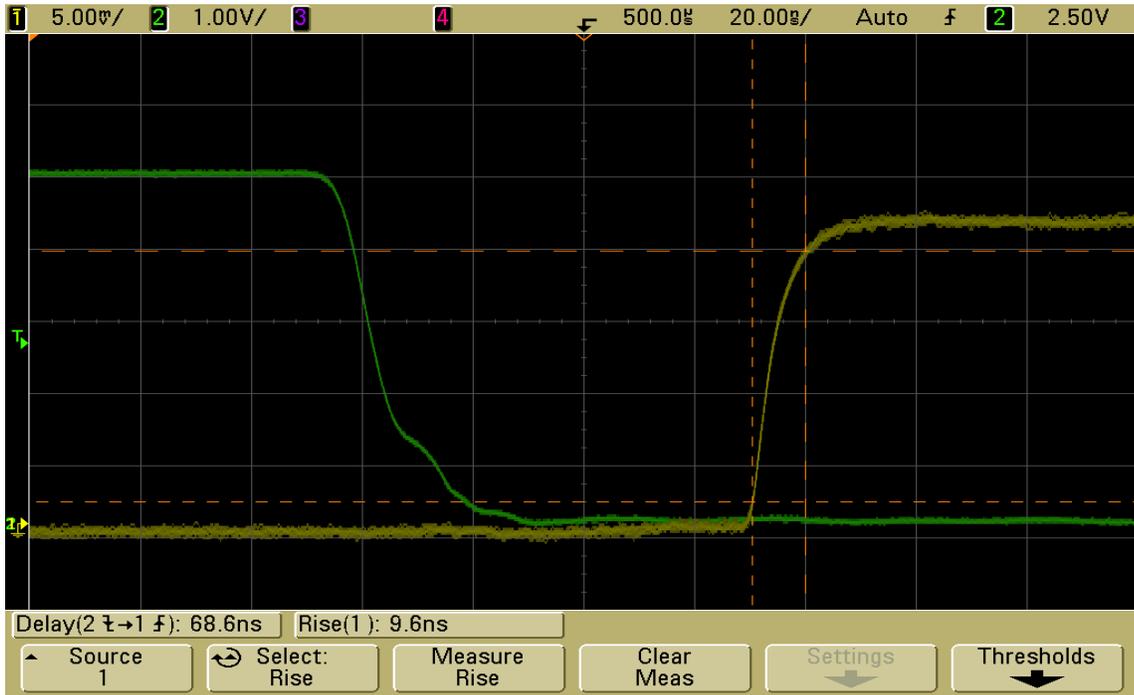
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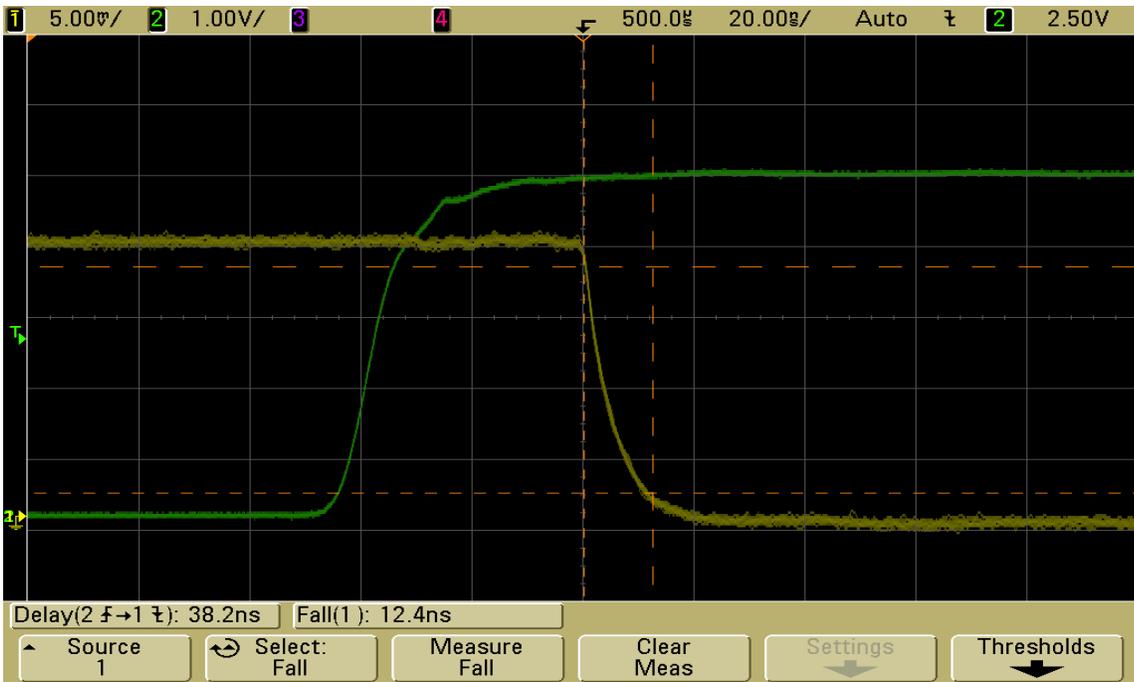
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SWITCHING SPEED ON



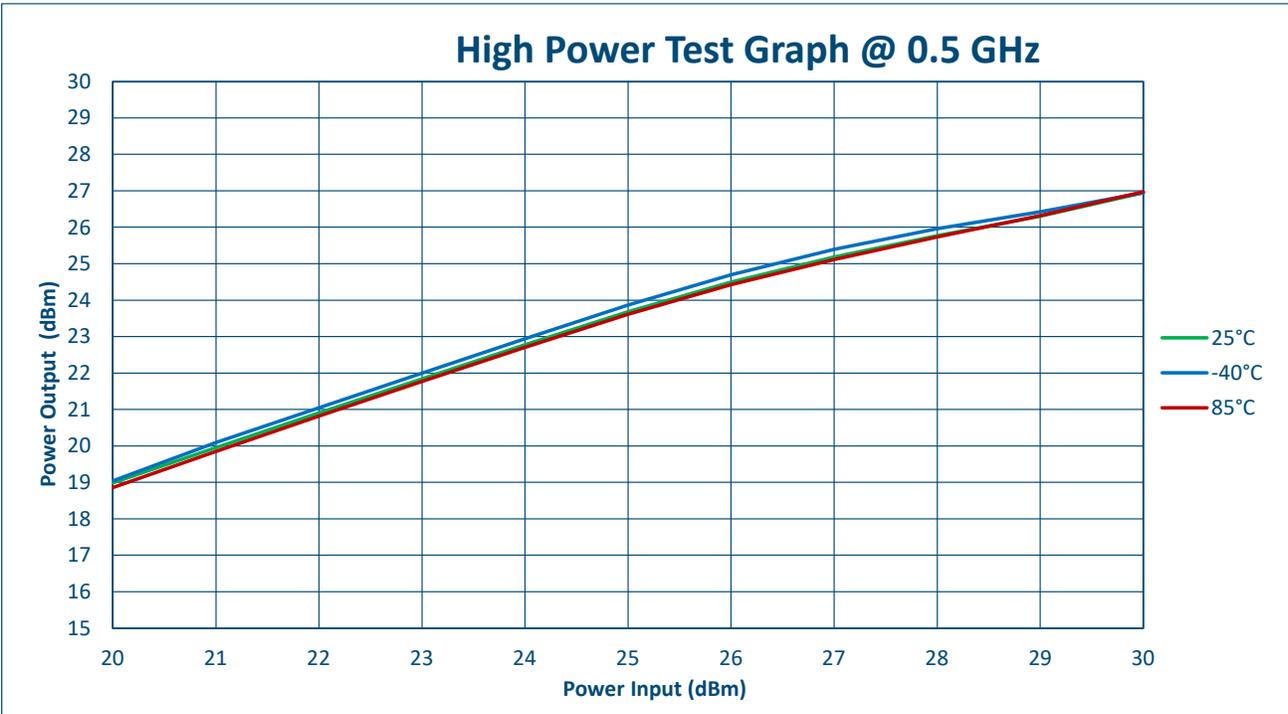
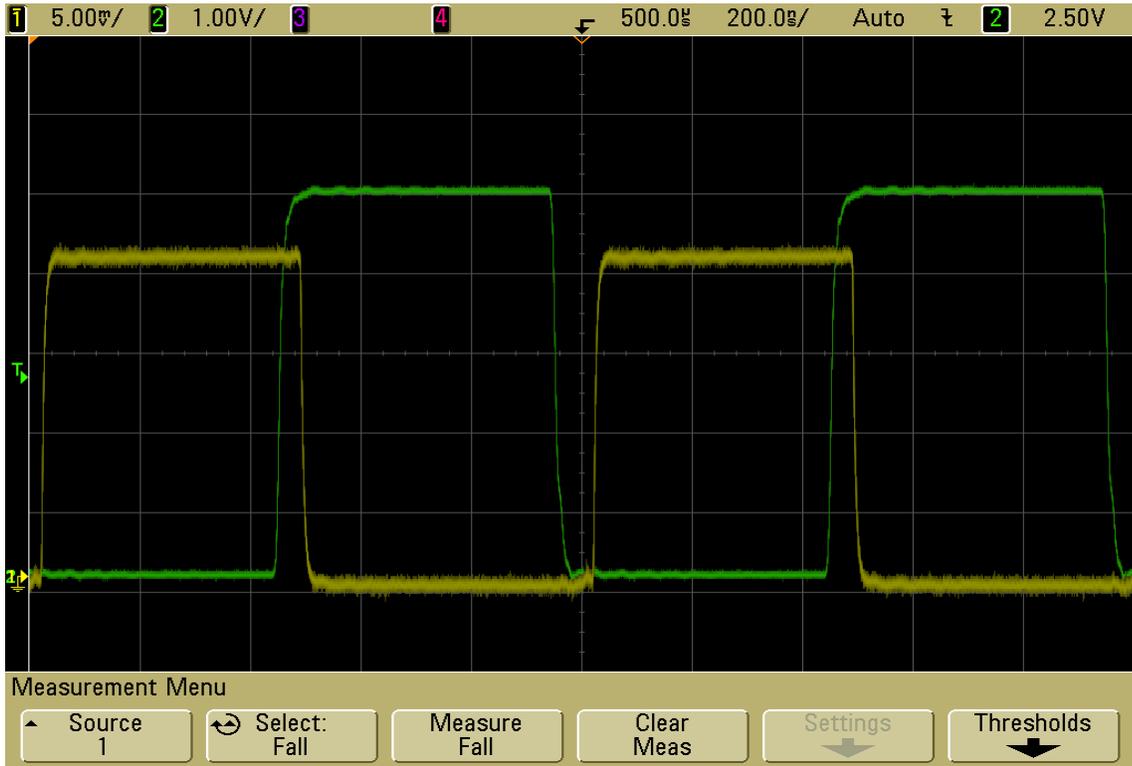
SWITCHING SPEED OFF



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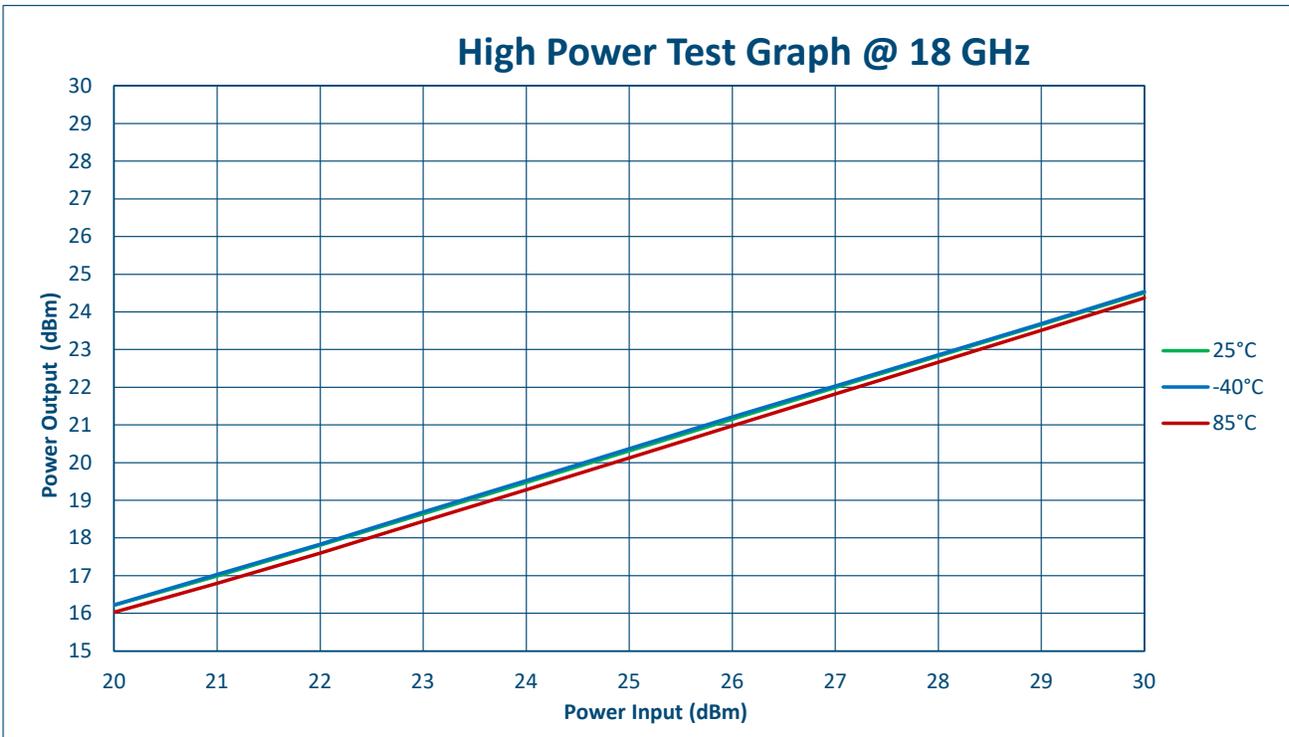
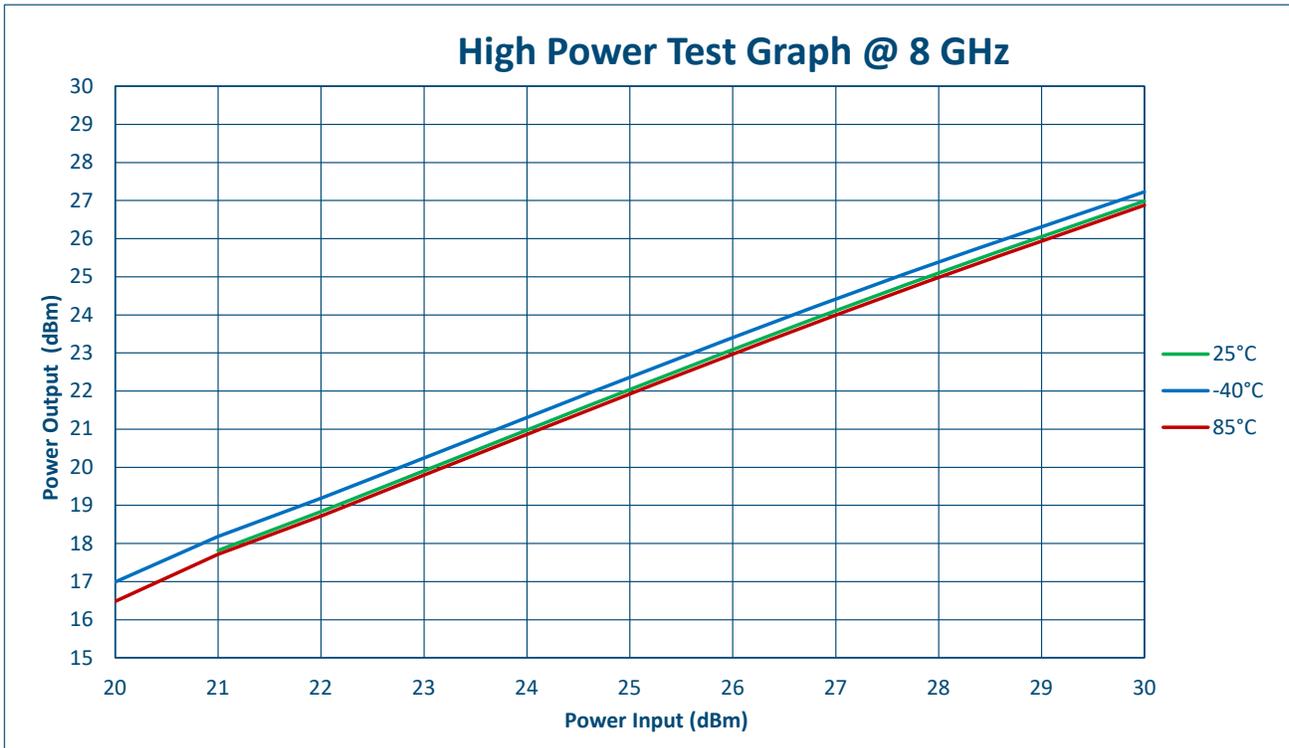
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FULL PULSE



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