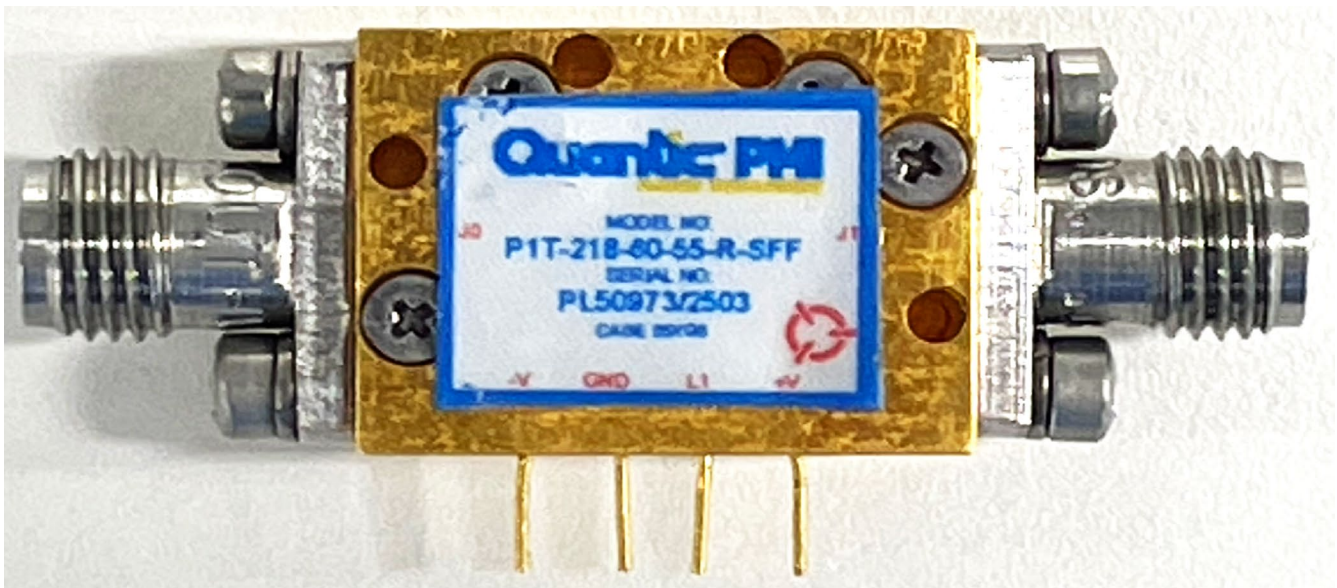


TYPICAL CHARACTERISTIC ON P1T-218-60-55-R-SFF

PMI MODEL NO. P1T-218-60-55-R-SFF IS A SINGLE POLE, SINGLE THROW, REFLECTIVE SWITCH OPERATING OVER THE FREQUENCY RANGE OF 2.0 TO 18.0 GHz. IT HAS A MINIMUM ISOLATION OF 60 dB AND A MAXIMUM INSERTION LOSS OF 1.8 dB. THIS MODEL IS OUTFITTED WITH SMA FEMALE CONNECTORS.



Reported By Matt L.
Tested By Eric K.
Date 1/30/2025

TYPICAL CHARACTERISTIC ON P1T-218-60-55-R-SFF

PRODUCT FEATURE

DESCRIPTION

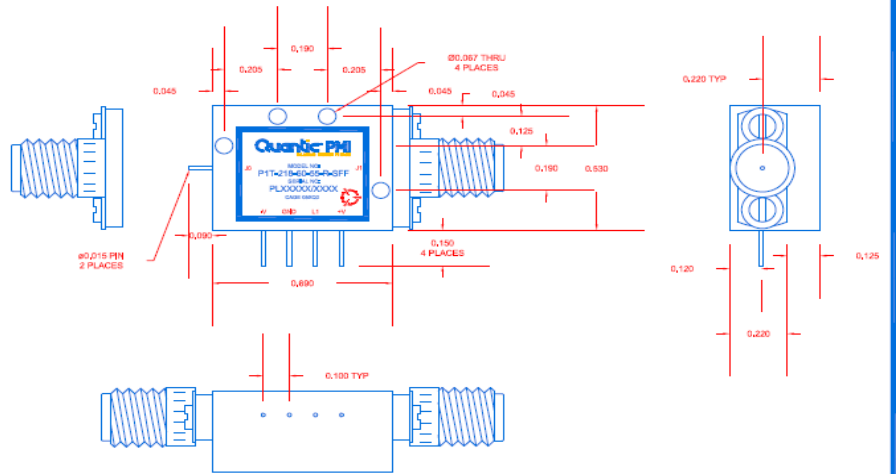
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REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	8/1/2024	

SPECIFICATIONS

- FREQUENCY RANGE: 2.0 TO 18.0 GHz
- INTERFACE: TTL (1: OFF, 0: ON)
- ISOLATION: 60 dB MIN
- INSERTION LOSS: 1.8 dB MAX
- SWITCHING TIME: 30 ns MAX
- VSWR: 1.9:1 MAX
- IMPEDANCE: 50 OHMS
- RF INPUT POWER: 1W CW / 2W PEAK MAX
- SUPPLY VOLTAGES: +5 V
-5 V
- SUPPLY CURRENT: +65 mA MAX
-65 mA MAX
- CONNECTORS: SMA FEMALE
- FINISH: GOLD PLATED

MECHANICAL OUTLINE



ENVIRONMENTAL RATINGS

- TEMPERATURE: -30 °C TO +95 °C (OPERATING)
-55 °C TO +125 °C (STORAGE)
- VIBRATION: RANDOM: 20 - 500 Hz
SPECTRAL DENSITY: 0.01g²/Hz
RMS: 2.2 g
- MECHANICAL SHOCK: PEAK: 100 g
DURATION: 4 ms, HALFSINE
- HUMIDITY: 90%
- PRESSURE: OPERATION: 0.6 - 1.4 BAR
STORAGE: 0.3 - 1.4 BAR
VARIATION: ±0.5 BAR
- CORROSION: RESISTANT AGAINST SEAWATER
- MTBF: 200,000 h
- EMC: NO RADIATION

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

PMI CONFIDENTIAL AND PROPRIETARY

7309-A GROVE ROAD
FREDERICK, MARYLAND 21704 USA
TEL: (301)-662-5019, FAX: (301)-662-1731
WEB: www.quanticmpmi.com
EMAIL: sales@quanticmpmi.com
ISO 9001 CERTIFIED

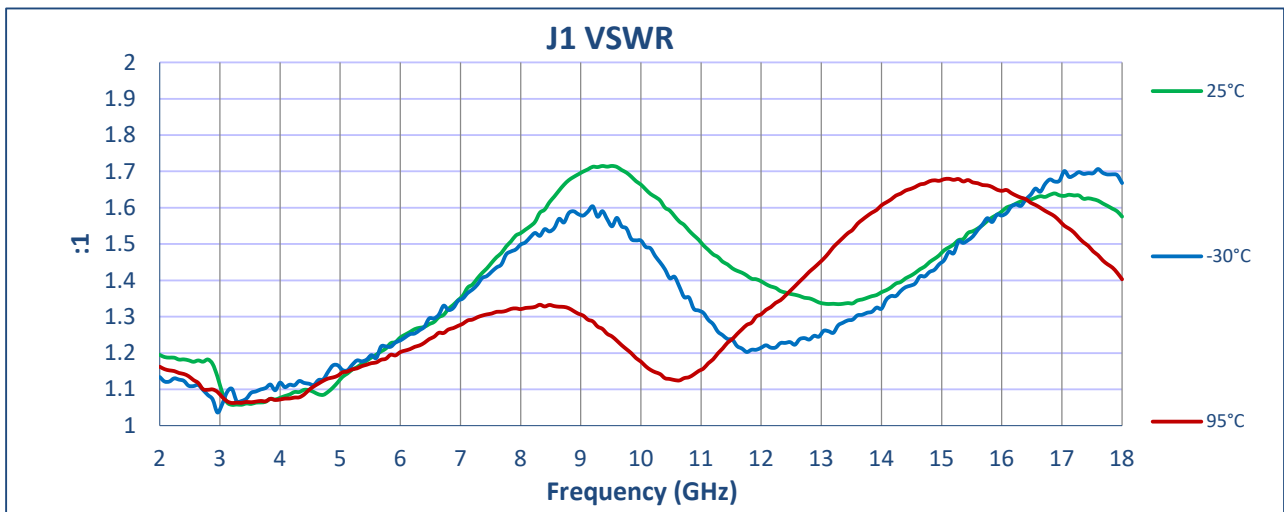
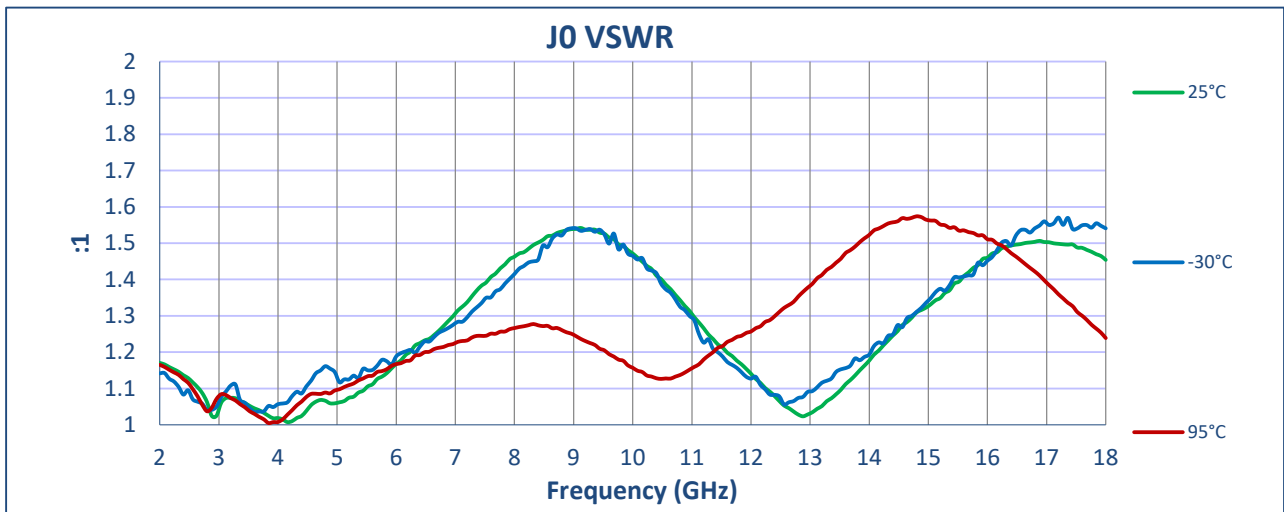
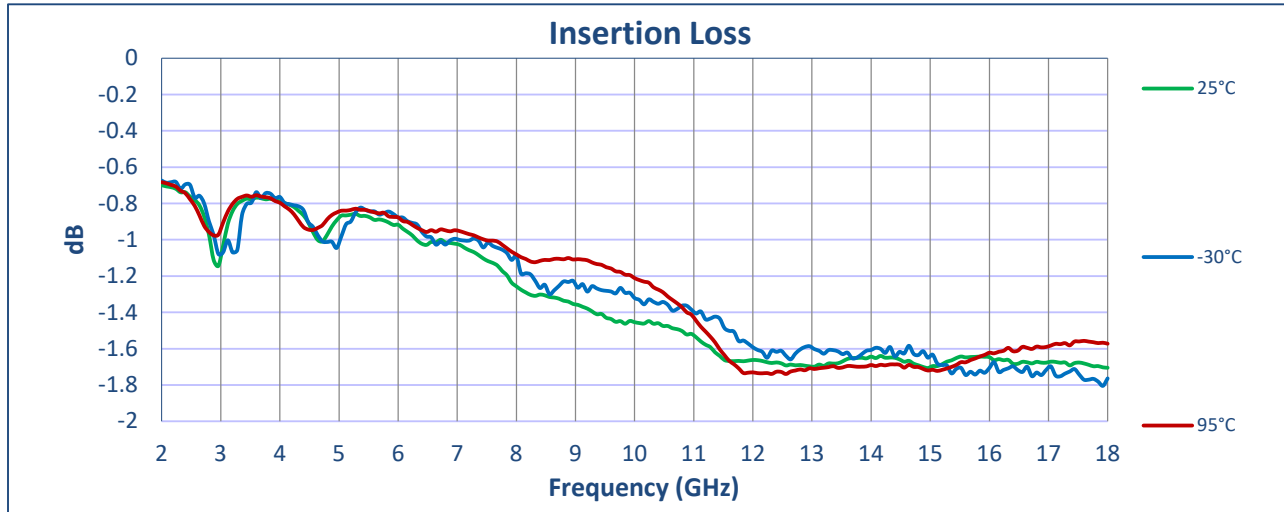


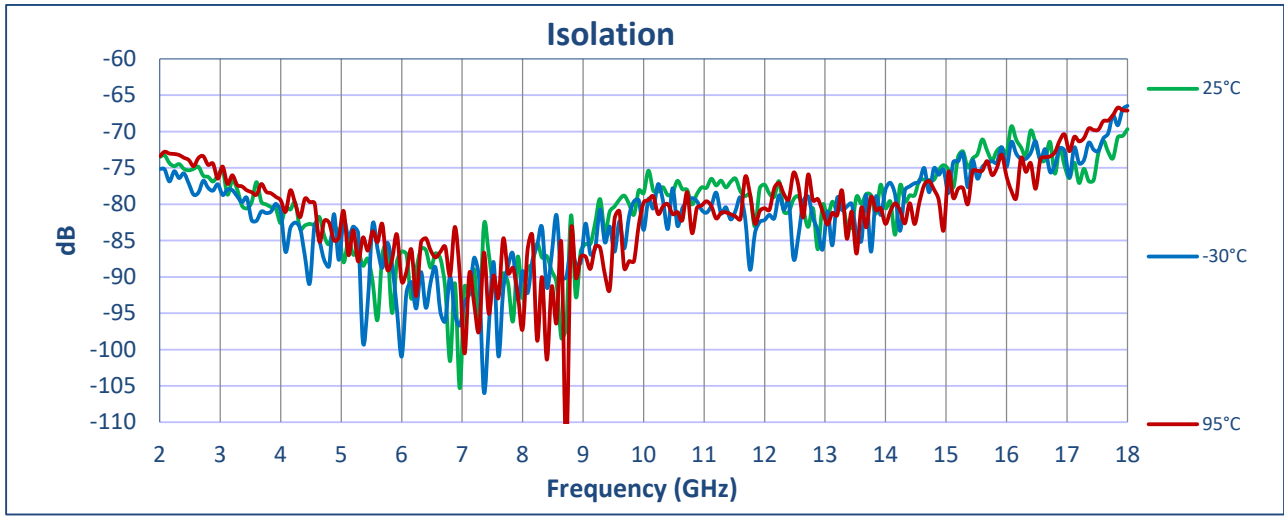
APPROVALS		DATE	TITLE			REV.
DRAWN	<i>MDL</i>	8/01/2024	OUTLINE			
REDRAWN			P1T-218-60-55-R-SFF			
ISSUED			SIZE	PSOM NO.	DWG NO.	REV.
			A	05XQ0	27049220	A1
			SCALE	SHEET		
			N:S	1 OF 1		

ALL DIMENSIONS
ARE IN INCHES (DIM)
TOLERANCES:
XXX ±0.020
X.XXX ±0.010

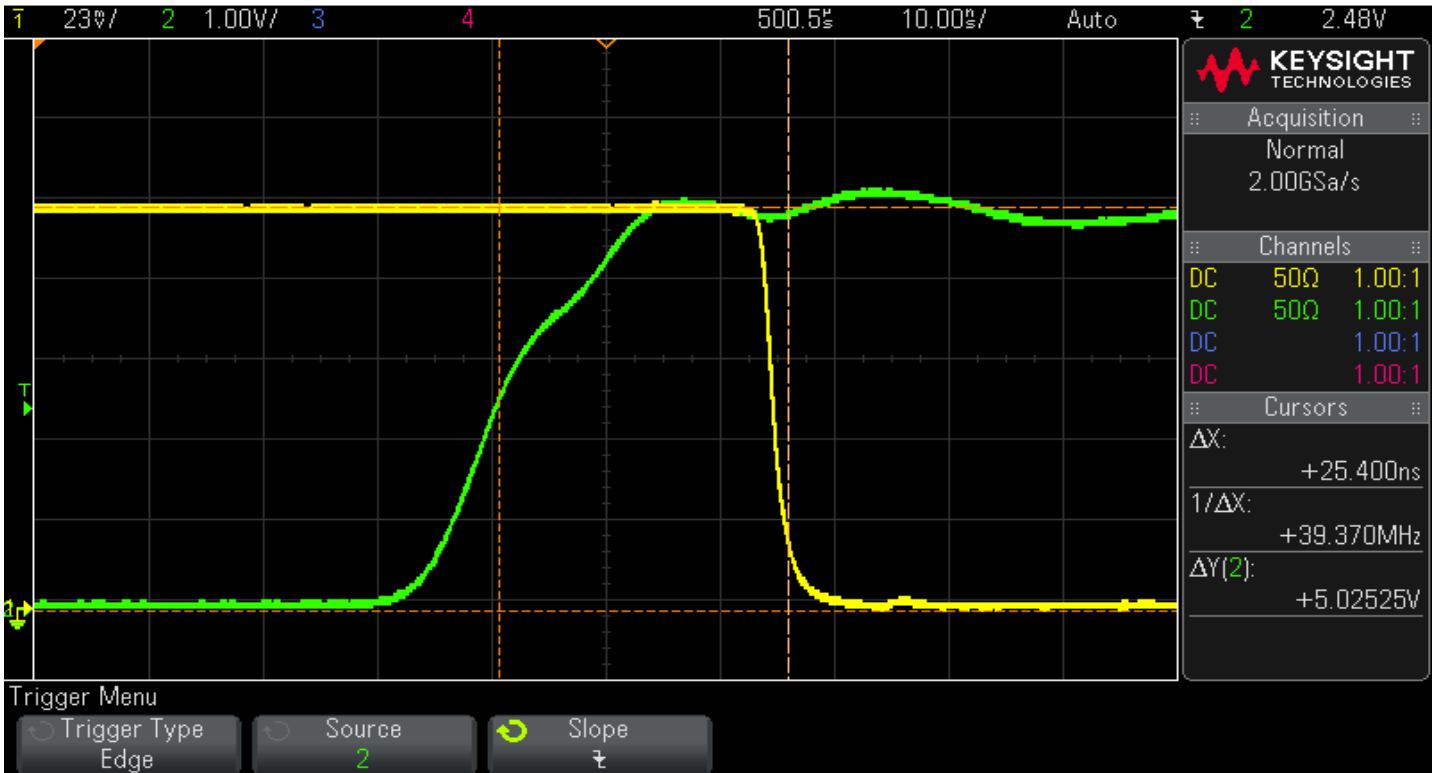
TEST DATA

TEST ITEM	PARAMETERS	SPECIFIED VALUE	TEST RESULTS		
			25°C	-30°C	95°C
1	Frequency Range	2 GHz to 18 GHz	2 GHz to 18 GHz		
2	Insertion Loss	1.8 dB Max.	1.71 dB	1.8 dB	1.74 dB
3	Isolation	60 dB Min.	69.3 dB	66.5 dB	66.7 dB
4	VSWR: In/Out	1.9:1 Max.	1.54:1 In 1.71:1 Out	1.57:1 In 1.71:1 Out	1.57:1 In 1.68:1 Out
5	Switching Speed Max	30 ns Max.	On: 28.8 ns Off: 25.4 ns		
6	Power Supply	5 V @ 65 mA Max. -5 V @ 65 mA Max.	5 V @ 60 mA -5 V @ 60 mA		





Switching Speed Off



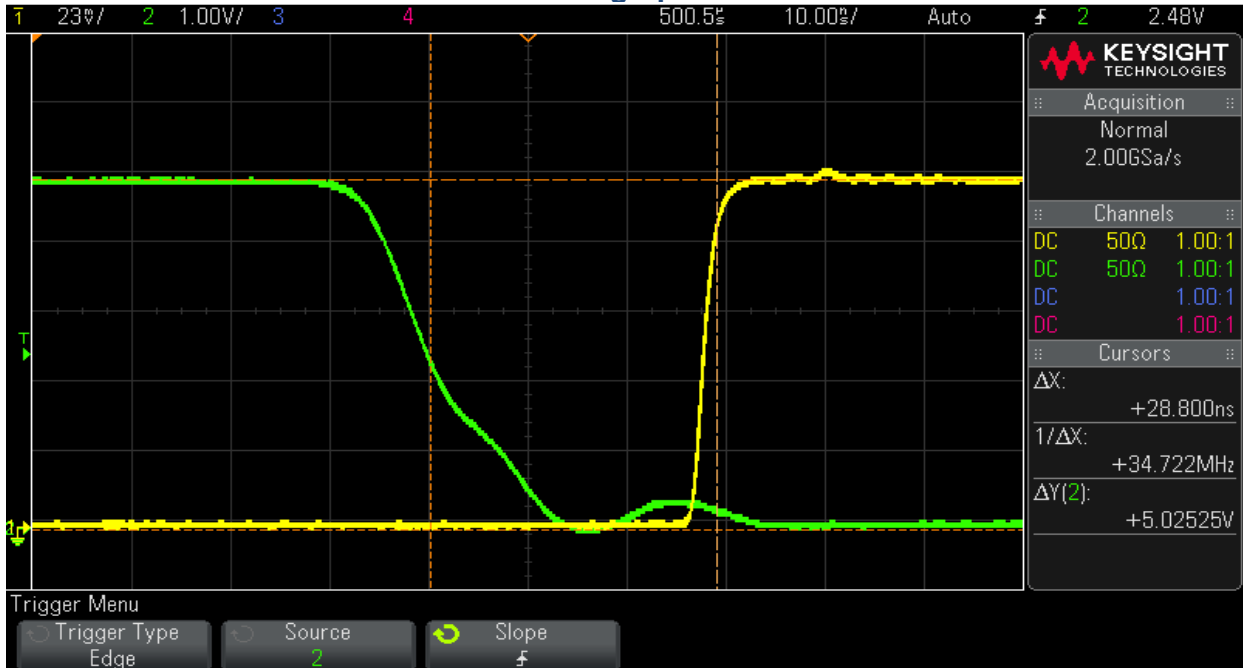
TTL - YELLOW
RF - GREEN

Off Time: 25.4 ns

ON

P1T-218-60-55-R-SFF

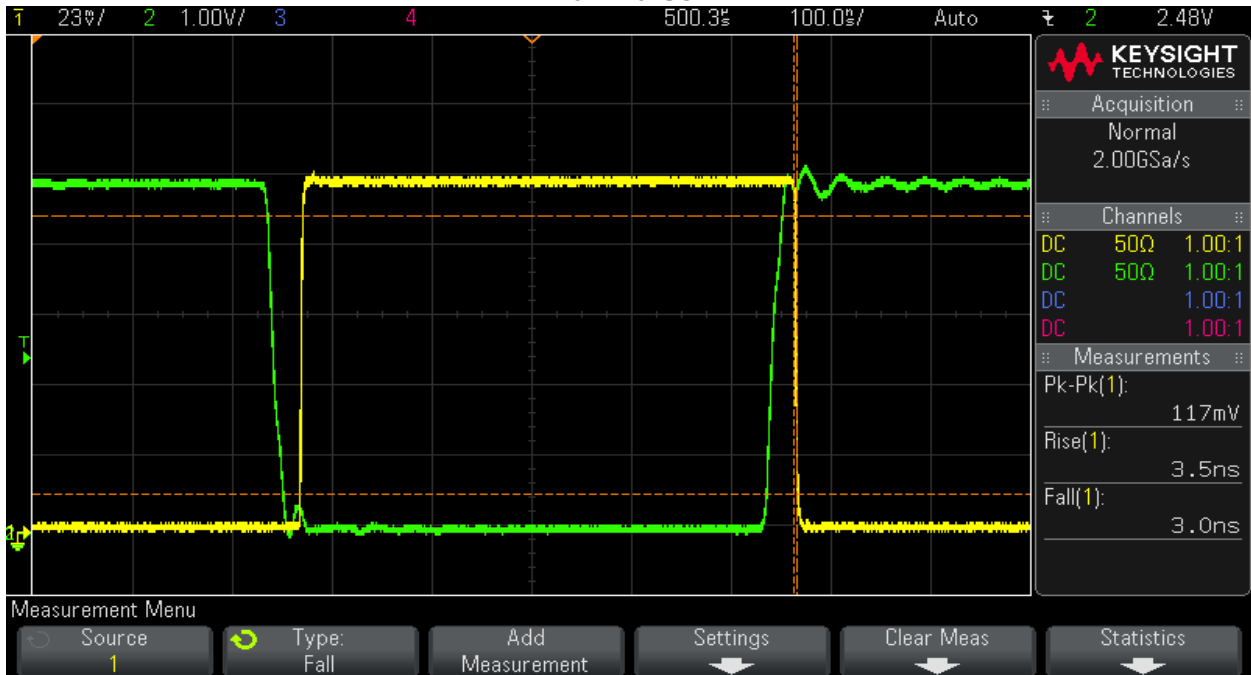
Switching Speed On



TTL- YELLOW
RF - GREEN

On Time: 28.8 ns

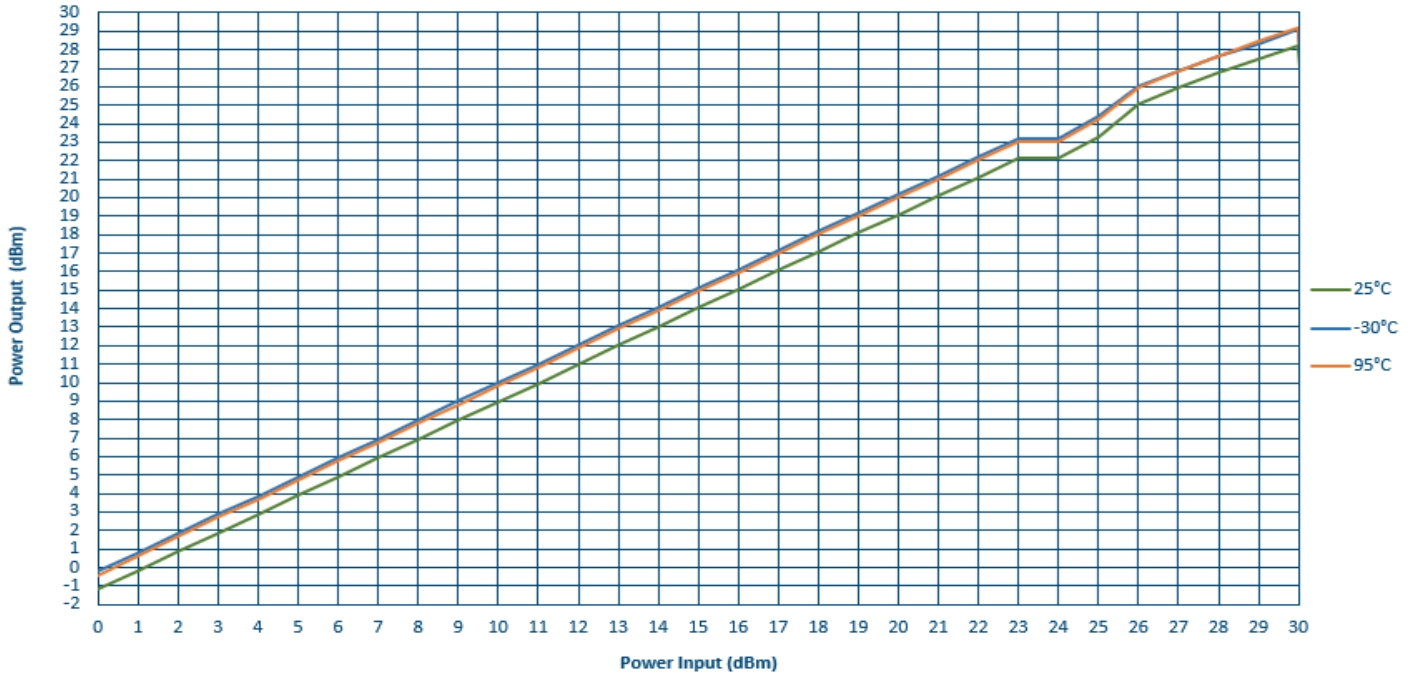
Full Pulse



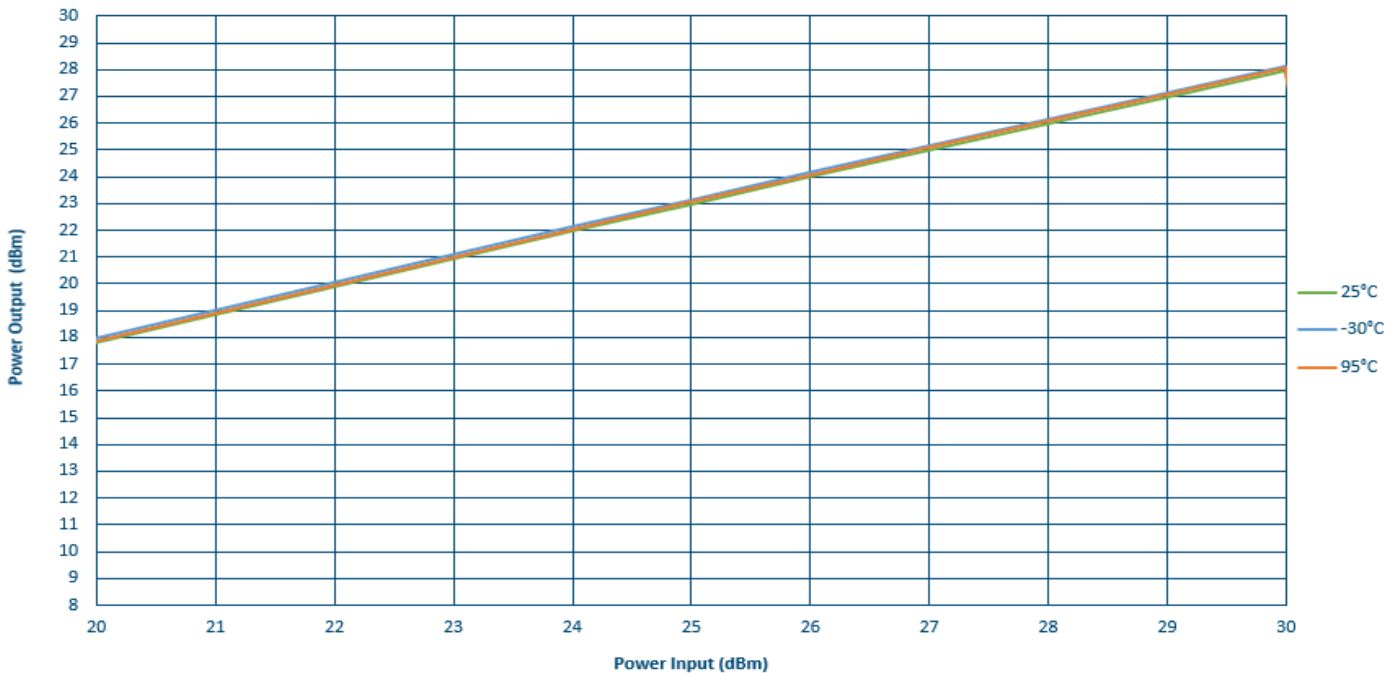
TTL- YELLOW
RF - GREEN

High Power

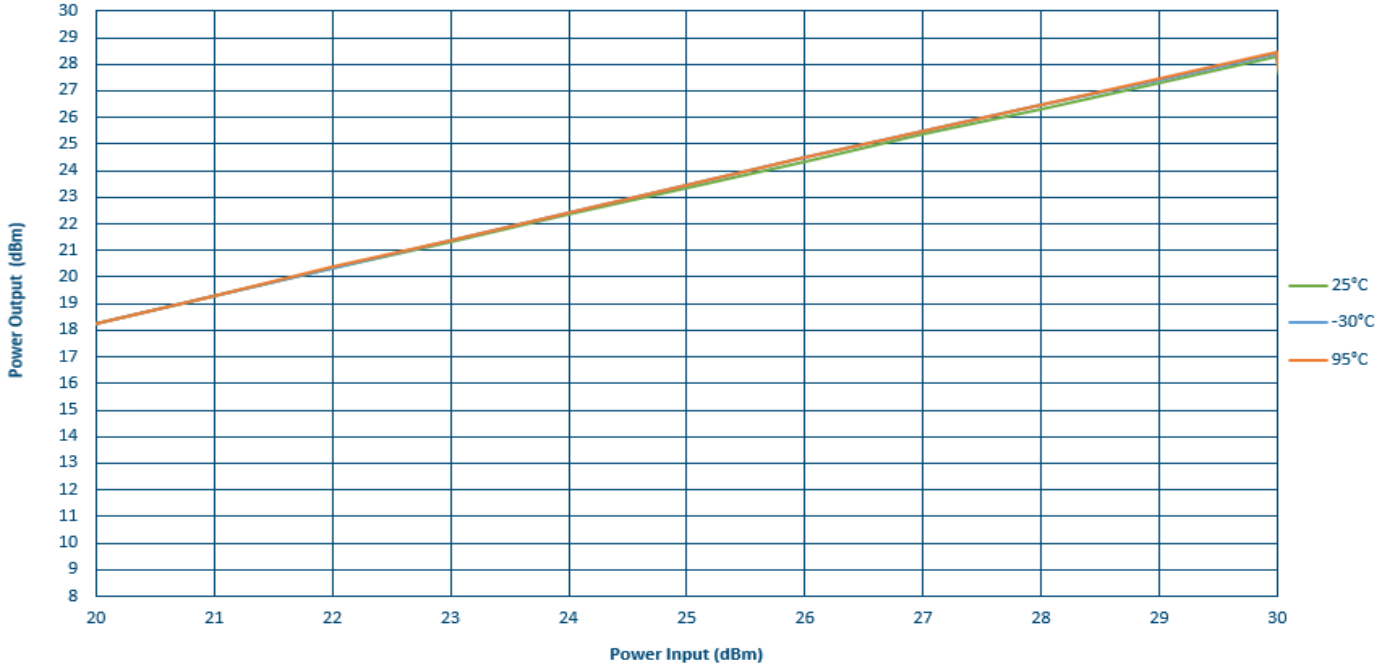
High Power Test Graph @ 2 GHz



High Power Test Graph @ 8 GHz



High Power Test Graph @ 18 GHz



Peak Power Data (Pulse PW-1μs/PRF-1kHz/Duty Cycle 10%)

