



**SUMMARY TEST DATA  
ON  
P2T-8G18G-40-R-TFF-120W**

Customer: \_\_\_\_\_ Tested By: A. Lopez/Shan  
 SO No: \_\_\_\_\_ Temperature: +25°C  
 Model No: P2T-8G18G-40-R-TFF-120W Date: 11/6/17  
 Serial No: PL21785/1745 Drawing No: 27629671 Rev: 1

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	8.0 to 18.0 GHz	8.0 to 18 GHz	
2	Power:	120W (CW)	125.89 W See Graph	
3	Insertion Loss:	2.2dB Max. at band edges for 20% bandwidth and typically 1.75 dB goal. For mid-band of 80% of the bandwidth 2.0dB Max., and typically 1.5 dB goal	2.17dB See Plot	
4	Isolation:	40dB	39.44 dB See Plot	
5	Switching Speed:	200 ns Max. (50% TTL to 90% RF and 50% TTL to 10% RF)	1.1 us 680 nsec. 610 nsec. See Plots	
6	VSWR in/out:	2:1 Max.	Input 2.20:1 Output 2.26:1 See Plots	
7	Load VSWR:	Better than 1.5:1	1.5:1 Typical	
8	Power Supply:	+5V @ 300mA -70V @ 60mA	300 mA 0 mA	

CONTROL: SINGLE TTL (TTL "0" J1-J3 "LOW LOSS")

J4 CONNECTIONS

PIN	CONNECT TO
1	U1 -70V
2	GROUND
3	U1 CONTROL
4	U1 +5V
5	U1 NC

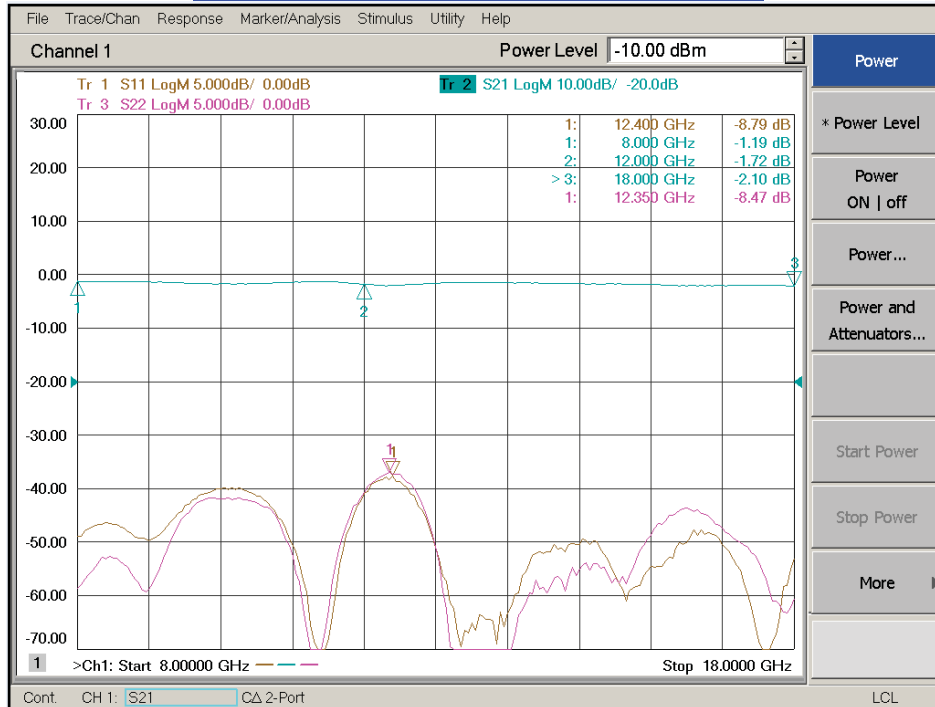
PIN	CONNECT TO
6	U1 GROUND
7	U1 GROUND
8	U1 GROUND
9	U1 GROUND

QA/QC Approval: \_\_\_\_\_ Date: \_\_\_\_\_

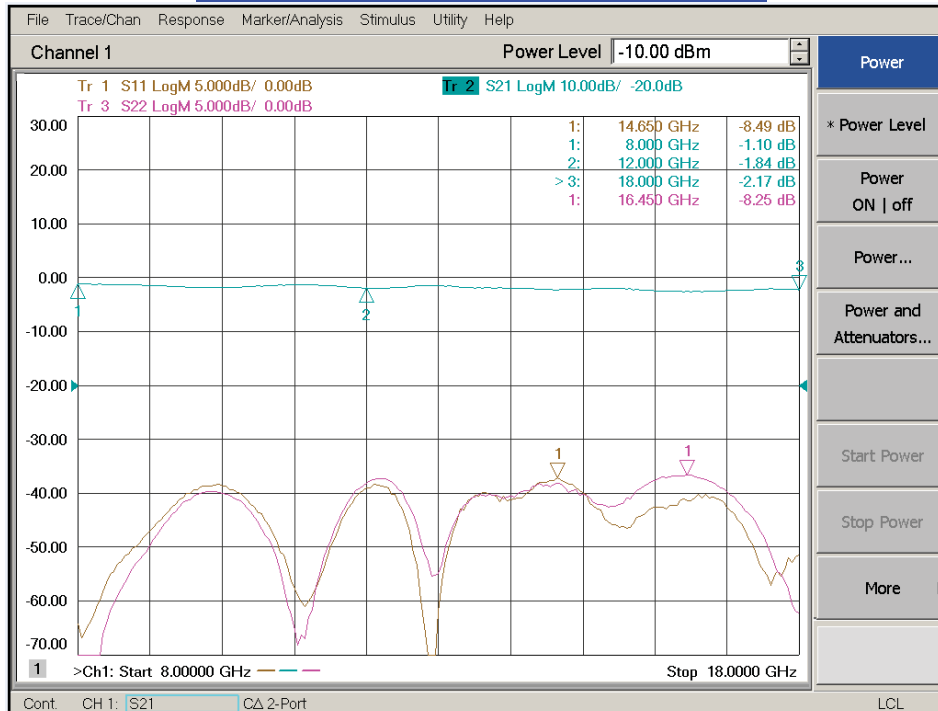


## SUMMARY TEST DATA ON P2T-8G18G-40-R-TFF-120W

### J1-J2 Insertion Loss and Return Loss



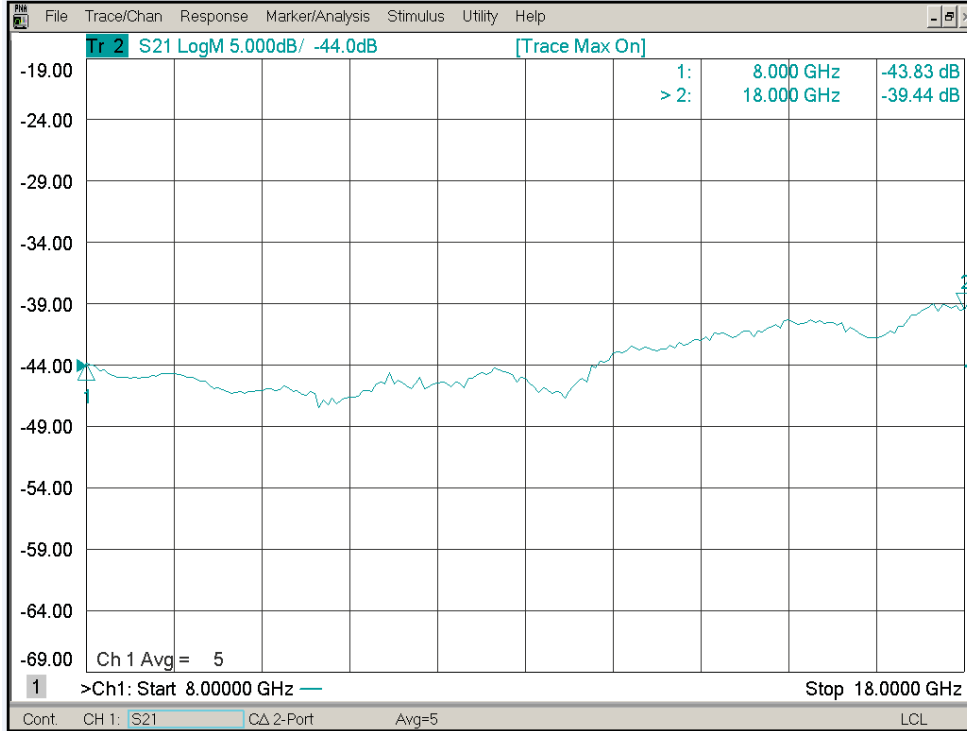
### J1-J3 Insertion Loss and Return Loss



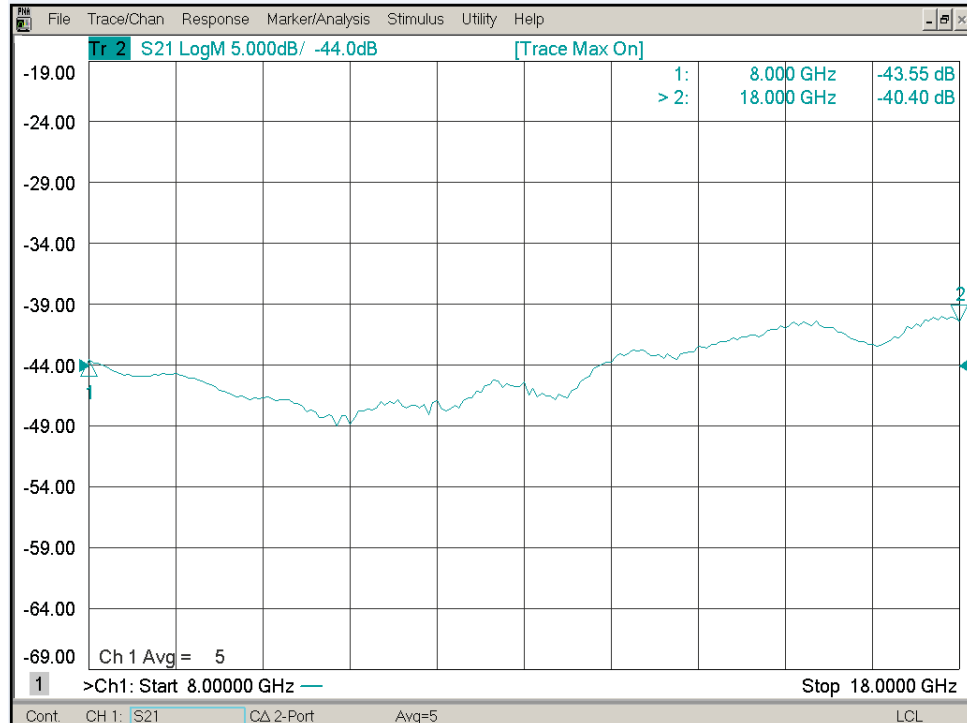


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**J1-J2 Isolation**



**J1-J3 Isolation**

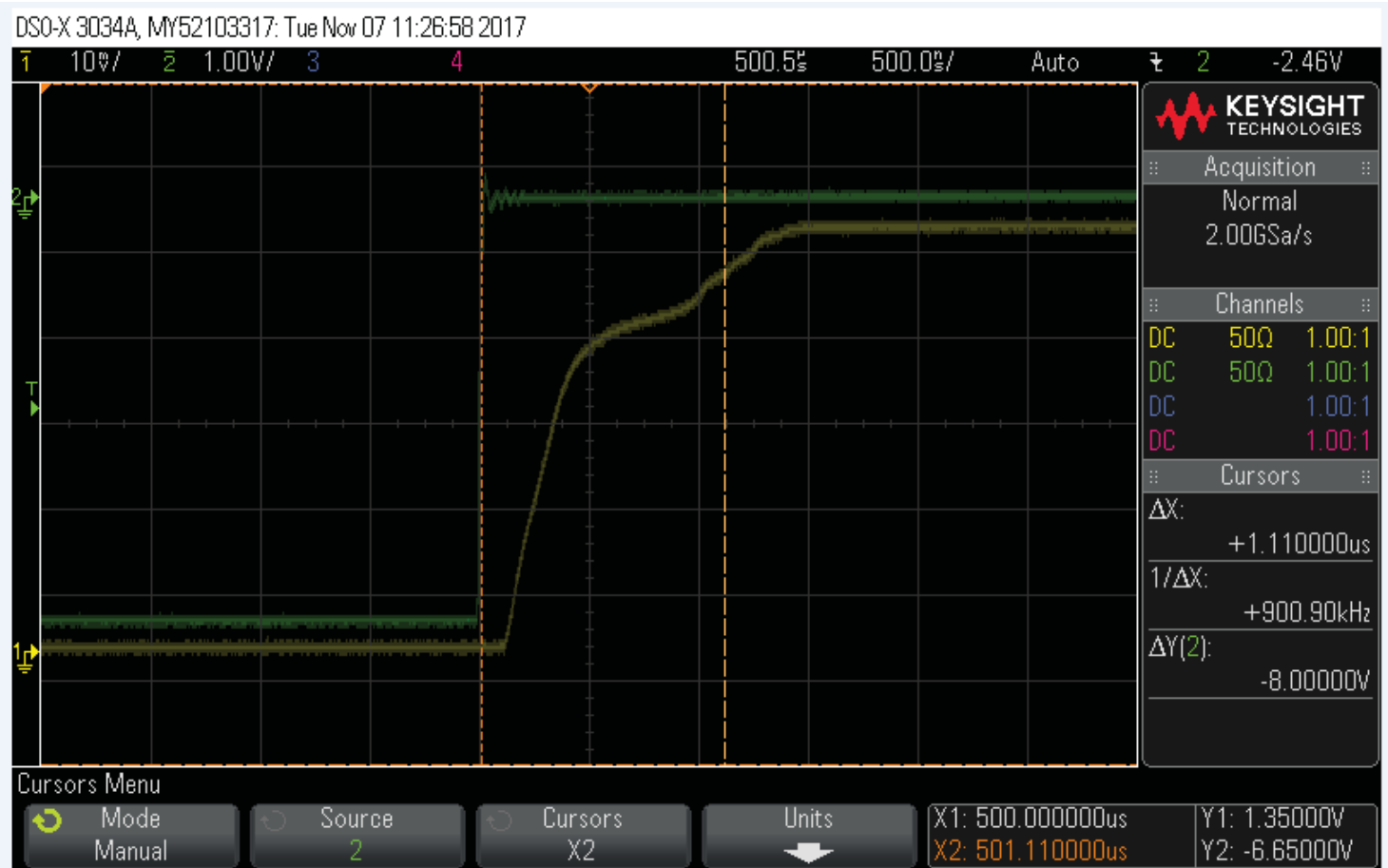




**SUMMARY TEST DATA  
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**Switching Speed On and Rise Time  
500 ns per Division**

**DC VOLTAGE +5VDC @ 210 mA AND -70 VDC @ 0 ma  
Switching Speed On 1.1 useg.**



**Yellow Trace: RF Signal  
Green Trace: TTL Signal**

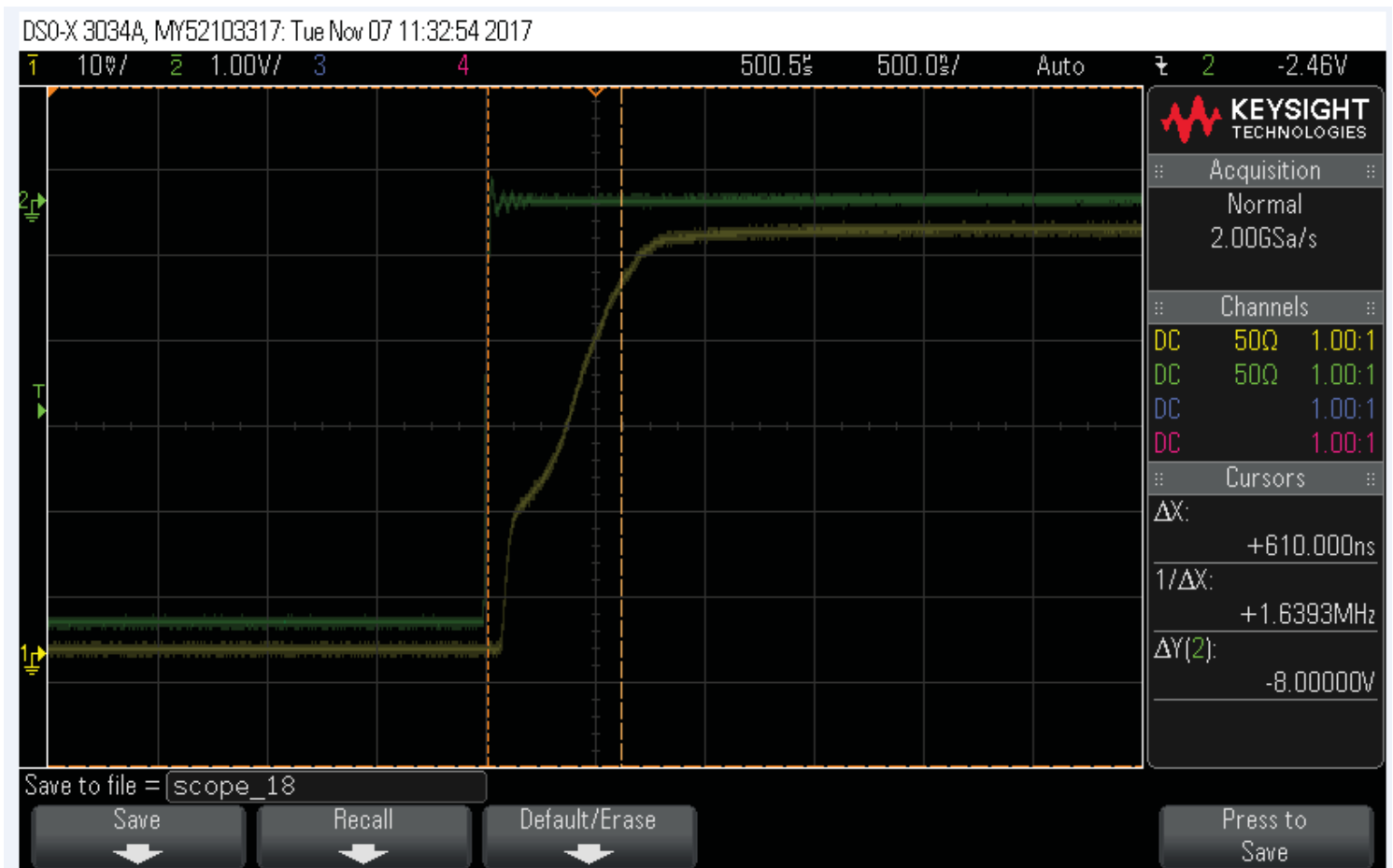


**SUMMARY TEST DATA  
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P2T-8G18G-40-R-TFF-120W**

**Switching Speed ON Time Fall Time  
500 nseg per Division**

**DC VOLTAGE +3.5VDC @ 220 mA AND -80 VDC @ 0 ma  
Switching Speed On 610 nseg.**

**DC VOLTAGE +3.5VDC @ 220 mA AND -70 VDC @ 0 ma  
Switching Speed On 680 nseg.**



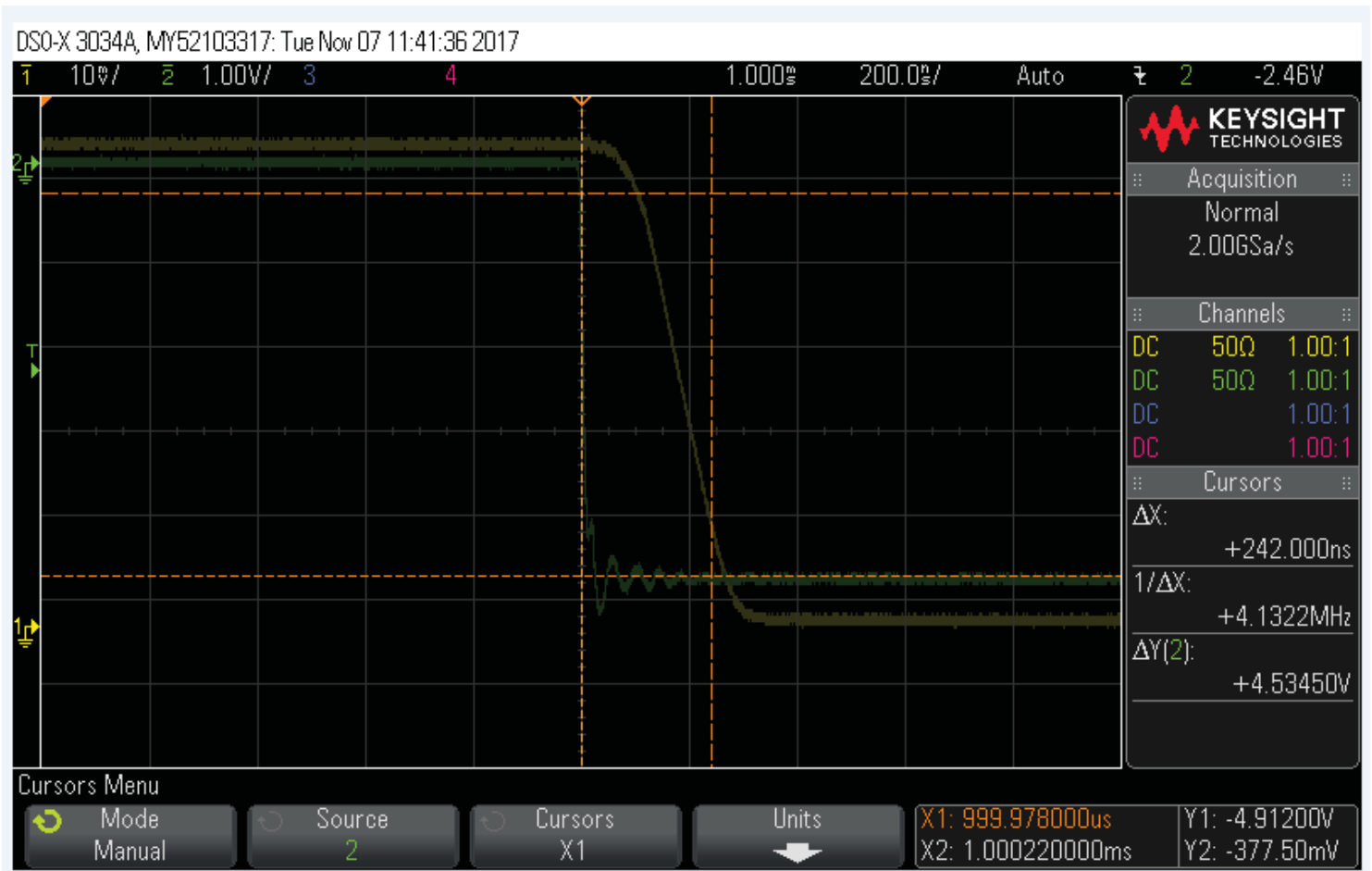
**Yellow Trace: RF Signal  
Green Trace: TTL Signal**



**SUMMARY TEST DATA  
ON  
P2T-8G18G-40-R-TFF-120W**

**Switching Speed Off Time Fall Time  
200 nseg per Division**

**DC VOLTAGE +3.5VDC @ 220 mA AND -70 VDC @ 0 ma  
Switching Speed On 242 nseg**

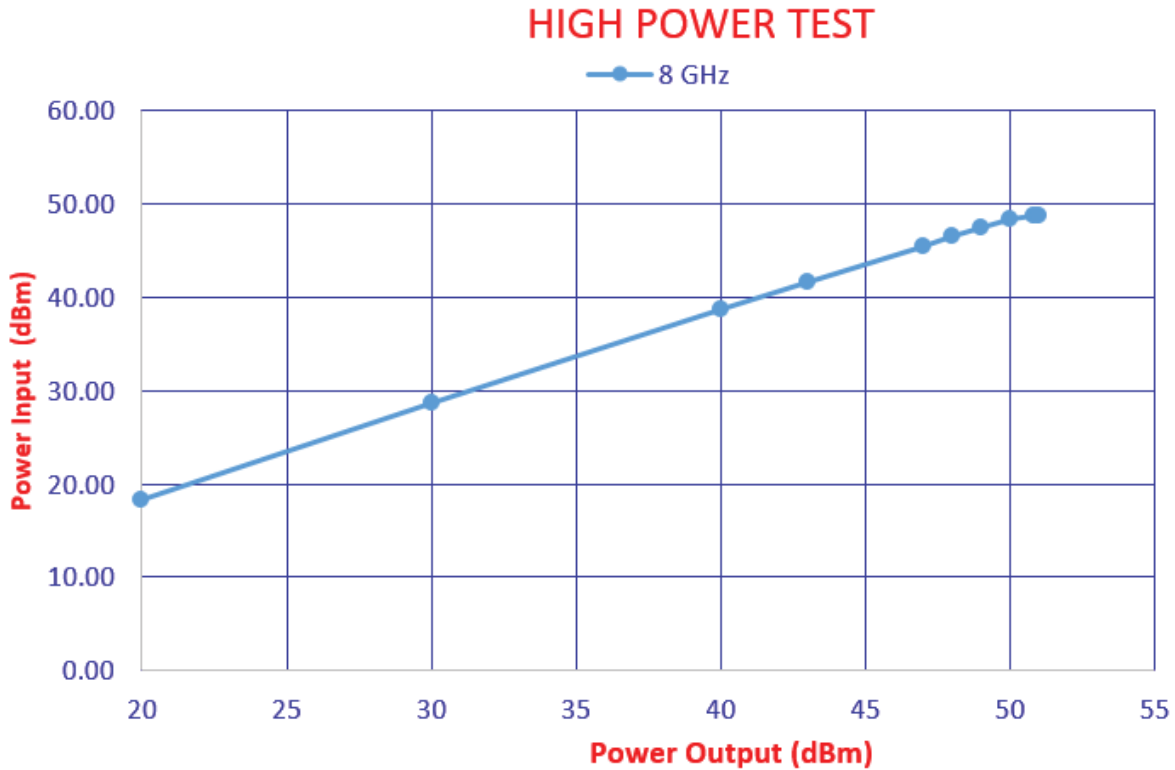


**Yellow Trace: RF Signal  
Green Trace: TTL Signal**



**SUMMARY TEST DATA  
ON  
P2T-8G18G-40-R-TFF-120W**

**High Power CW Output Power Vs. Input Power Graph**  
**Frequency = 8 GHz**



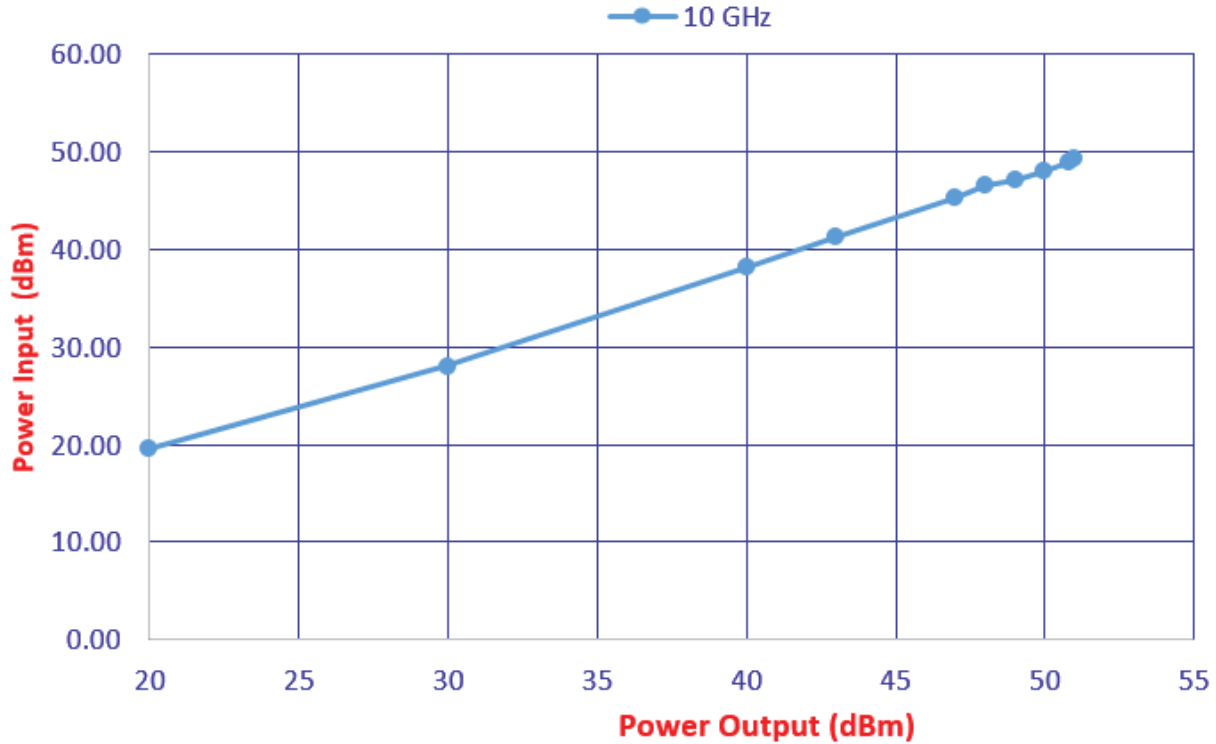
<b>SERIAL NUMBER</b>	PL21785/1745		
<b>FREQUENCY</b>	8 GHZ		
<b>POWER INPUT (dBm)</b>	<b>POWER INPUT (Watts)</b>	<b>POWER OUTPUT (dBm)</b>	<b>TEMPERATURE</b>
20	0.1	18.30	21.00
30	1	28.62	21.00
40	10	38.65	21.00
43	19.96	41.55	21.00
47	50.12	45.38	21.00
48	63.1	46.54	23.00
49	79.43	47.47	24.00
50	100	48.40	28.00
50.8	120.23	48.77	29.00
51	125.89	48.8	32.00



**SUMMARY TEST DATA  
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**High Power CW Output Power Vs. Input Power Graph**  
**Frequency = 10 GHz**

**HIGH POWER TEST**



SERIAL NUMBER	PL21785/1745		
FREQUENCY	10 GHZ		
POWER INPUT (dBm)	POWER INPUT (Watts)	POWER OUTPUT (dBm)	TEMPERATURE
20	0.1	19.48	22.90
30	1	28.04	22.90
40	10	38.10	23.20
43	19.96	41.17	23.70
47	50.12	45.30	24.70
48	63.1	46.60	32.20
49	79.43	47.10	33.40
50	100	48.07	43.00
50.8	120.23	49	45.00
51	125.89	49.32	45.00

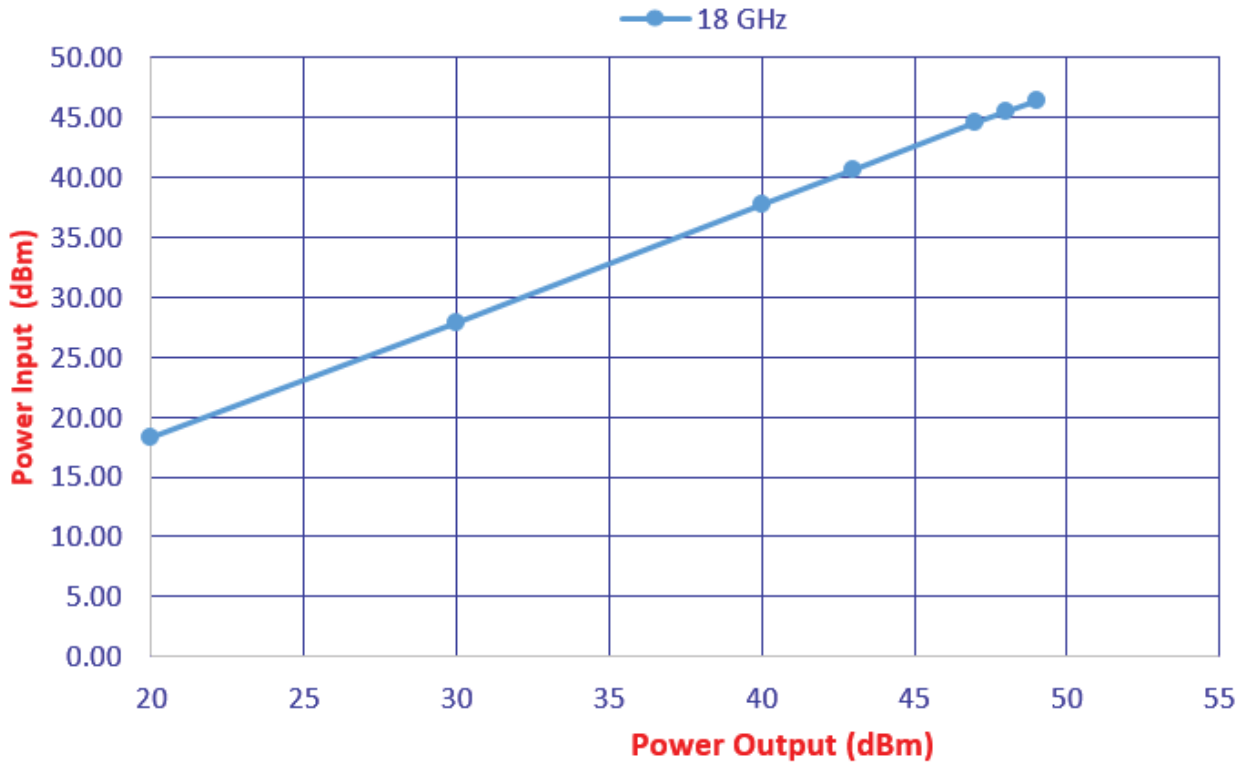




**SUMMARY TEST DATA  
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**High Power CW Output Power Vs. Input Power Graph**  
**Frequency = 18 GHz**

**HIGH POWER TEST**



SERIAL NUMBER	PL21785/1745		
FREQUENCY	18 GHZ		
POWER INPUT (dBm)	POWER INPUT (Watts)	POWER OUTPUT (dBm)	TEMPERATURE
20	0.1	18.32	21.50
30	1	27.79	21.60
40	10	37.66	22.00
43	19.96	40.67	23.00
47	50.12	44.50	24.30
48	63.1	45.50	24.70
49	79.43	46.39	25.00
50	100		



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**HIGH POWER TEST**

