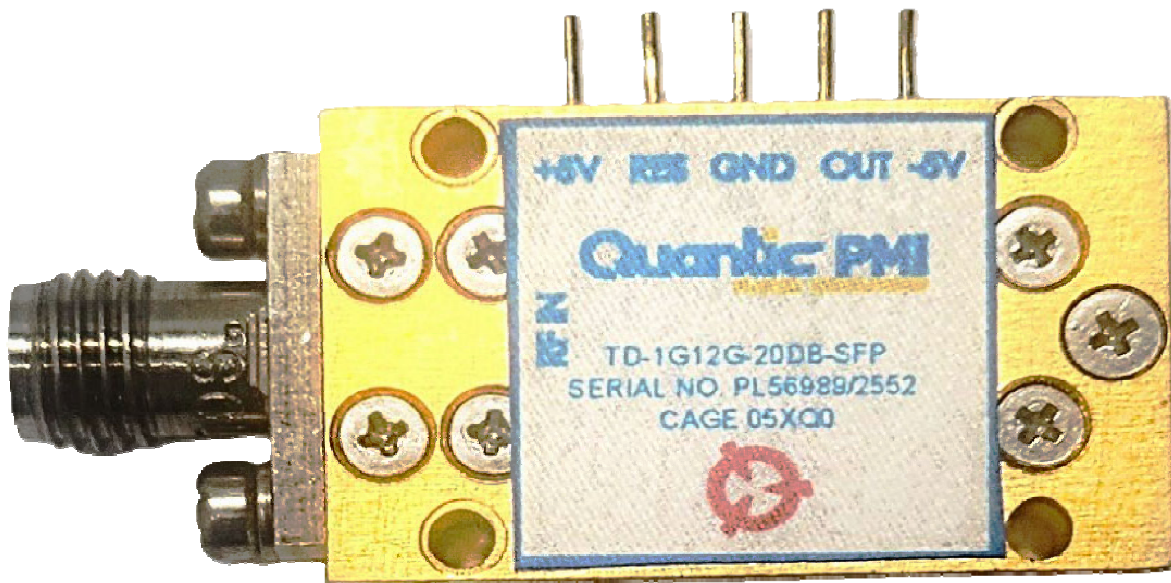


**TYPICAL CHARACTERISTICS
ON
TD-1G12G-20DB-SFP**

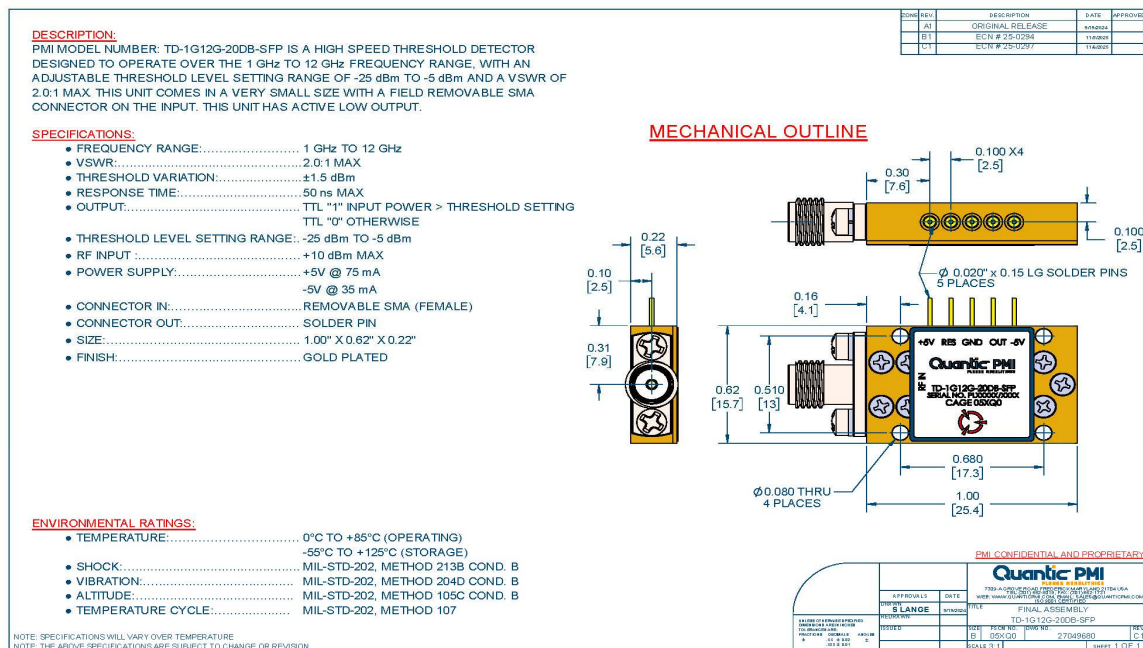
PLANAR MONOLITHICS INDUSTRIES MODEL NUMBER: TD-1G12G-20DB-SFP IS A HIGH SPEED THRESHOLD DETECTOR DESIGNED TO OPERATE THE 1GHz TO 12GHz FREQUENCY RANGE, WITH AN ADJUSTABLE THRESHOLD LEVEL OF -25dBm TO -5dBm AND A VSWR OF 2.0:1 MAX. THIS UNIT COMES IN A VERY SMALL SIZE WITH A FIELD REMOVABLE SMA CONNECTOR ON THE INPUT. THIS UNIT HAS ACTIVE LOW OUTPUT.



Tested By: Mohammad Sharif
Reported By: Mohammad Sharif
Date: 10/17/2025

**TYPICAL CHARACTERISTICS
ON
TD-1G12G-20DB-SFP**

Product Feature



**TYPICAL CHARACTERISTICS
ON
TD-1G12G-20DB-SFP**

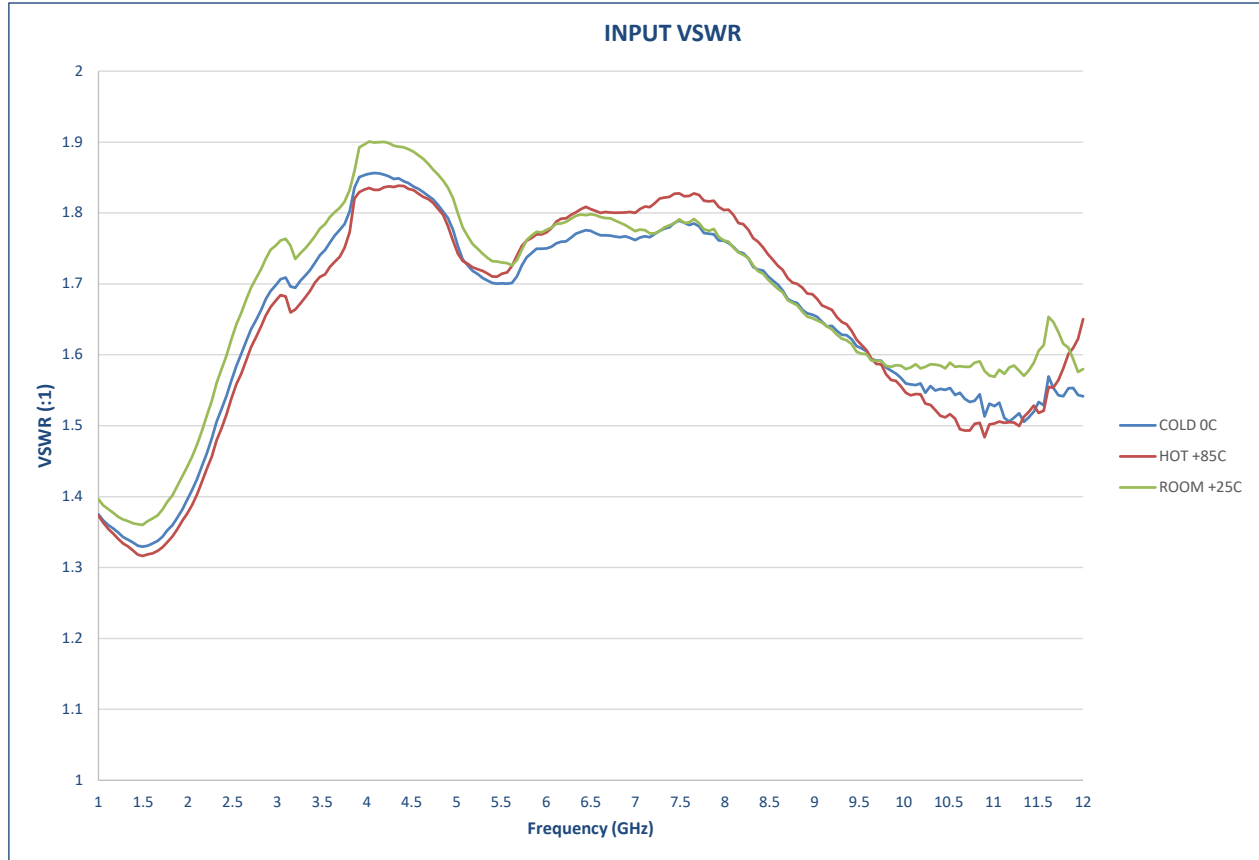
Test Data

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	TEST RESULTS			QA QC
			25°C	0°C	85°C	
1	Frequency Range:	1 GHz TO 12 GHz	1 GHz TO 12 GHz			
2	Threshold Level Setting Range:	-25 dBm TO -5 dBm	-25 dBm TO -5 dBm See Plots			
3	Threshold Variation: @ -25dBm:	± 1.5 dBm	-24 dBm TO -26 dBm ± 1 dBm			
		External RES	23 OHM	19 OHM	21 OHM	
	Threshold Variation: @ -5 dBm:	± 1.5 dBm	-4 dBm TO -6 dBm ± 1 dBm			
		External RES	1.611 kOhm	1.610 kOhm	1.311 kOhm	
4	VSWR:	2.0:1 Max	1.86:1	1.84:1	1.9:1	
5	Max RF Input:	+10 dBm Max.	+10 dBm	+10 dBm	+10 dBm	
6	Response Time:	50 ns Max.	TTL High 15.8 ns Max TTL Low 48 ns Max			
7	Output:	TTL "1": Input Power > Threshold Setting TTL "0": Otherwise	TTL "1": Input Power > Threshold Setting TTL "0": Otherwise			
8	Power Supply:	+5 VDC @ 75 mA Max. -5 VDC @ 35 mA Max.	+5V @72mA -5V @28mA	+5V @71mA -5V @27mA	+5V @75mA -5V @28mA	

**TYPICAL CHARACTERISTICS
ON
TD-1G12G-20DB-SFP**

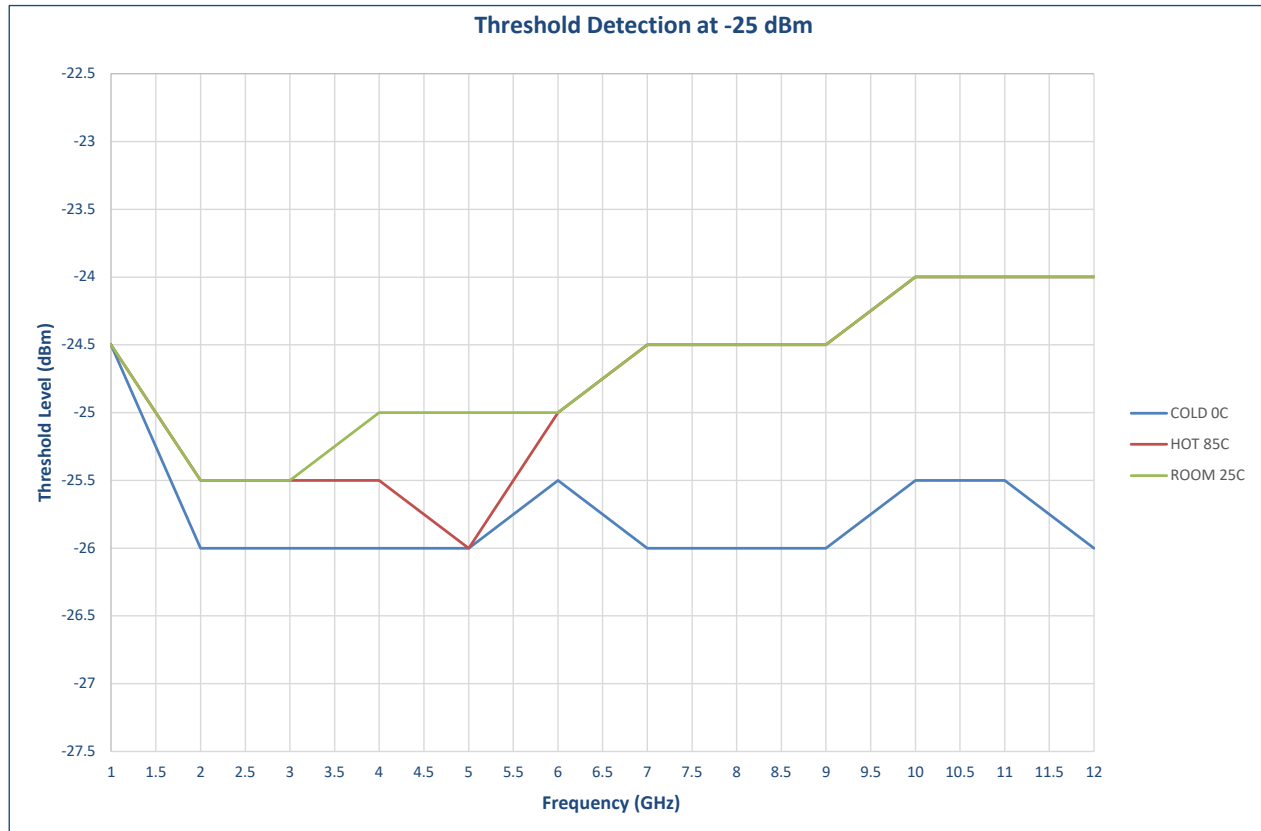
VSWR

SPEC: 2.0:1



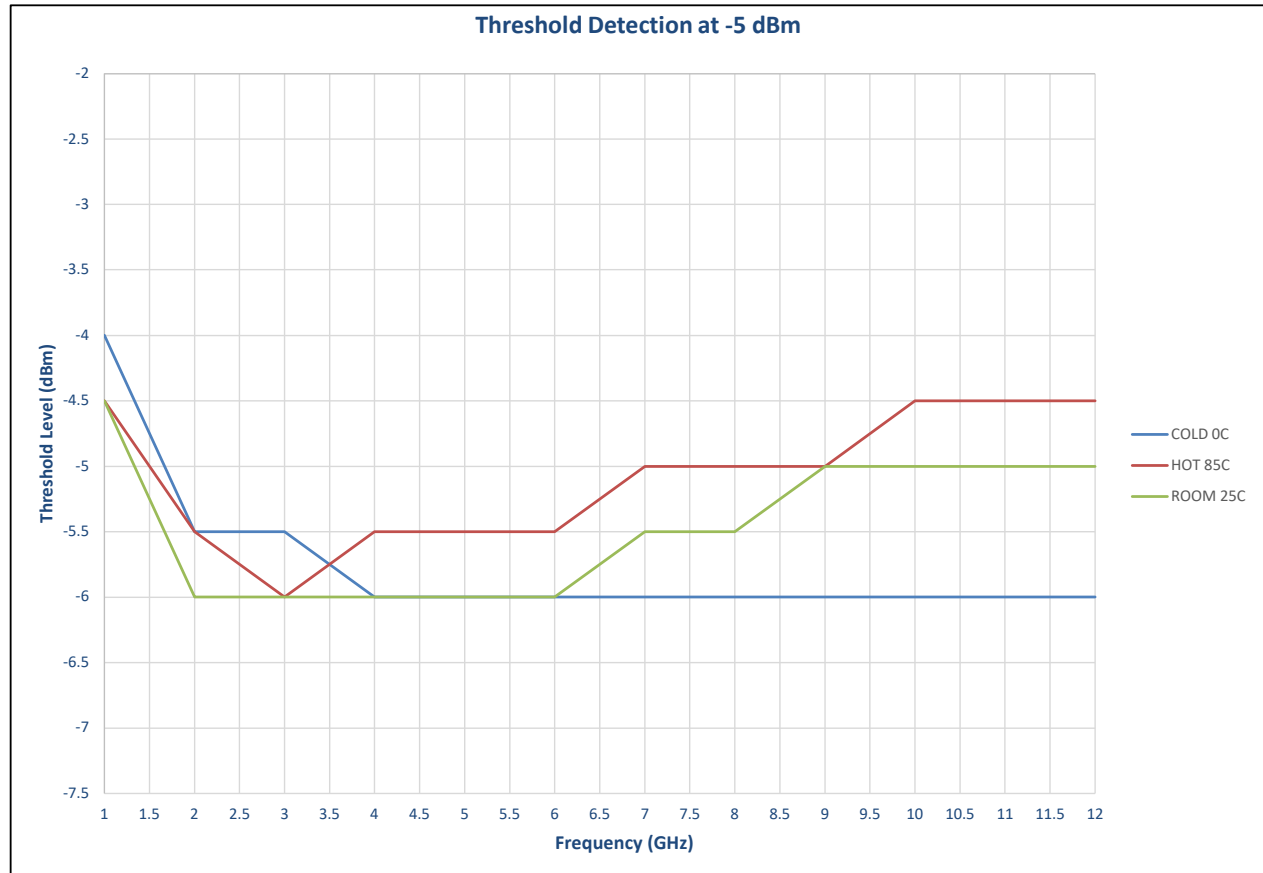
**TYPICAL CHARACTERISTICS
ON
TD-1G12G-20DB-SFP**

Threshold



**TYPICAL CHARACTERISTICS
ON
TD-1G12G-20DB-SFP**

Threshold

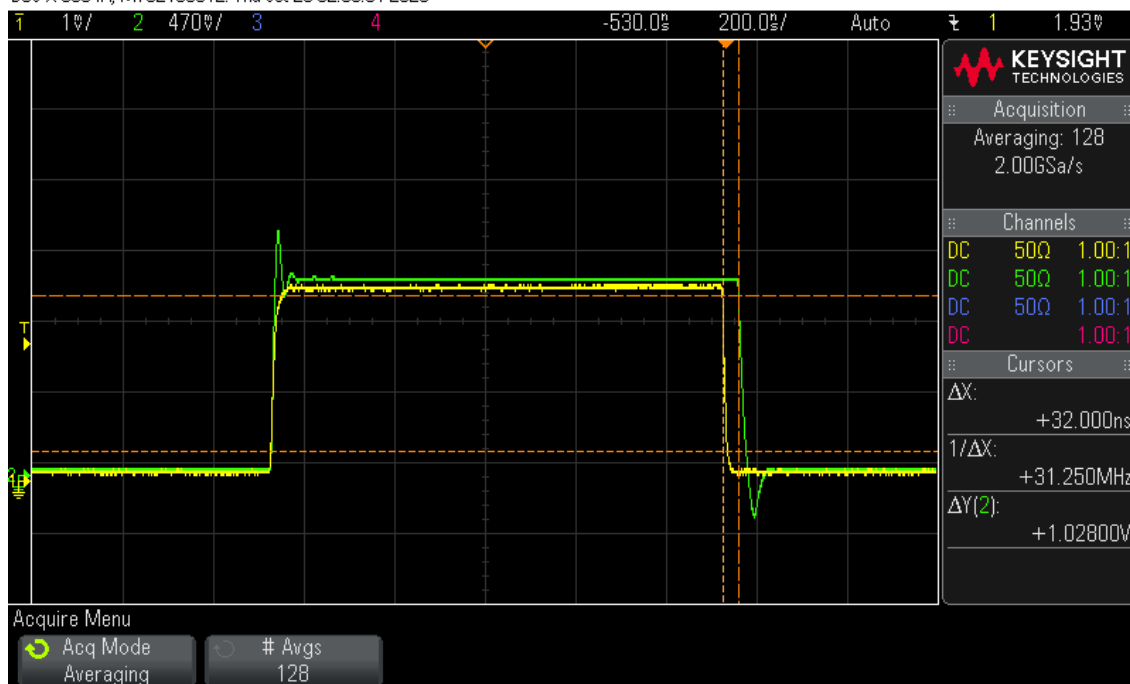


**TYPICAL CHARACTERISTICS
ON
TD-1G12G-20DB-SFP**

Response Time 6 GHz @ -5 dBm

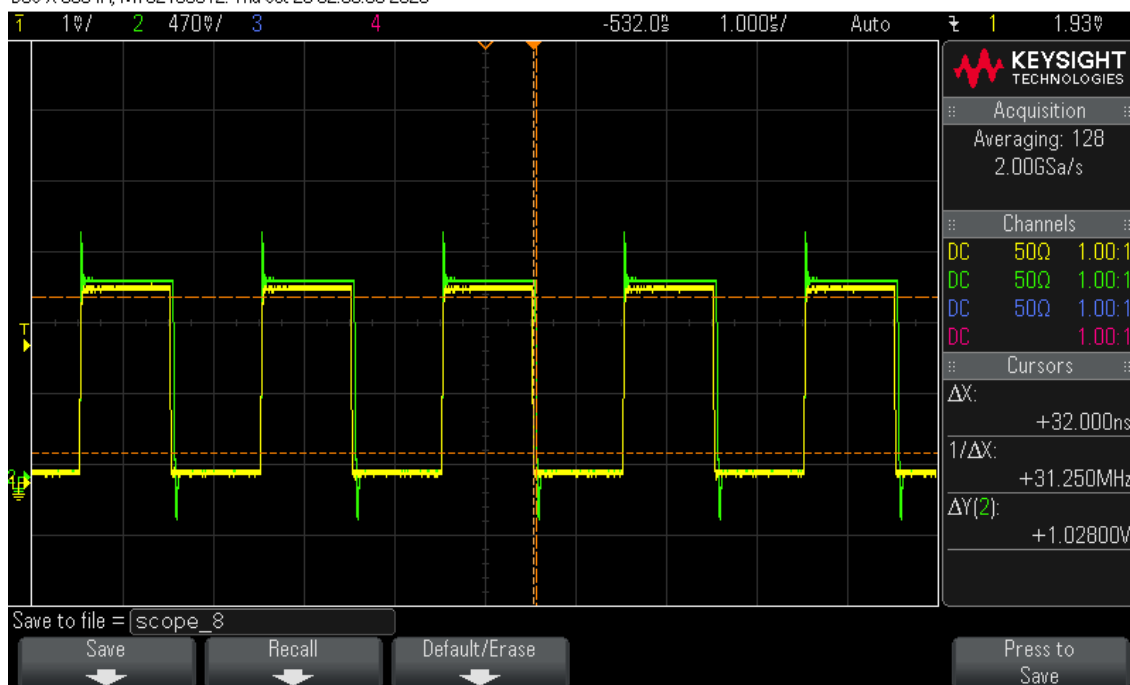
Channel 1 Yellow = RF Input
Channel 2 Green = TTI Output

DSO-X 3034A, MY52103312: Thu Oct 23 02:08:01 2025



Response
OFF

DSO-X 3034A, MY52103312: Thu Oct 23 02:08:36 2025

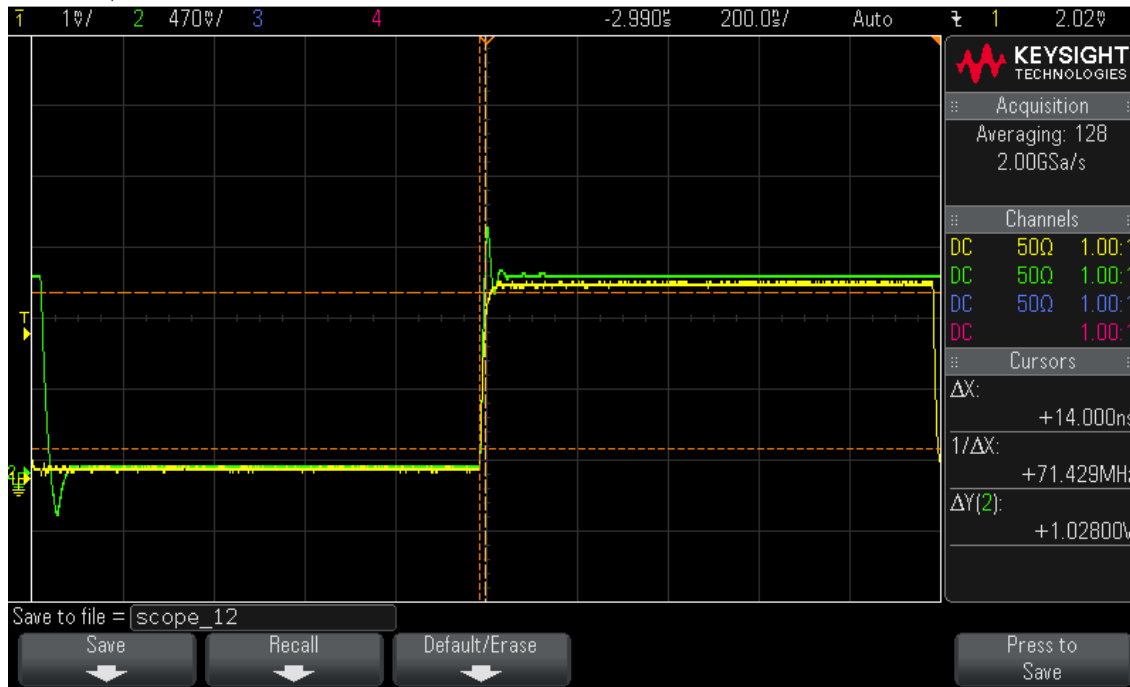


Full Pulse

**TYPICAL CHARACTERISTICS
ON
TD-1G12G-20DB-SFP**

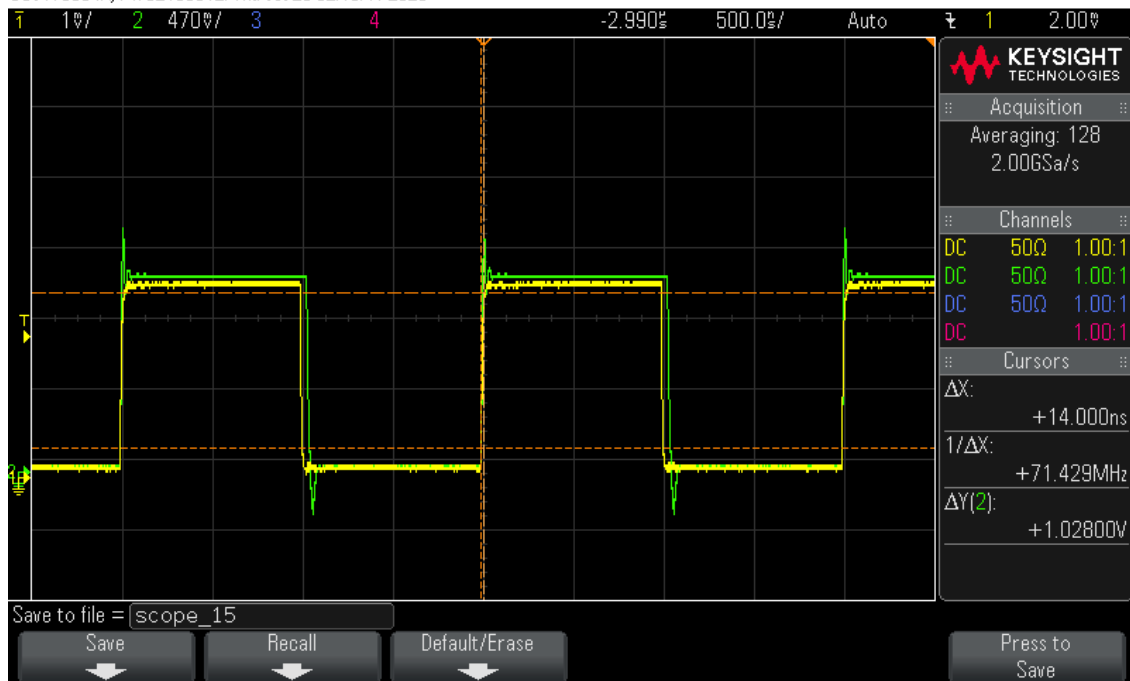
Response Time 6 GHz @-5 dBm

DSO-X 3034A, MY52103312: Thu Oct 23 02:15:14 2025



Response
ON

DSO-X 3034A, MY52103312: Thu Oct 23 02:15:41 2025

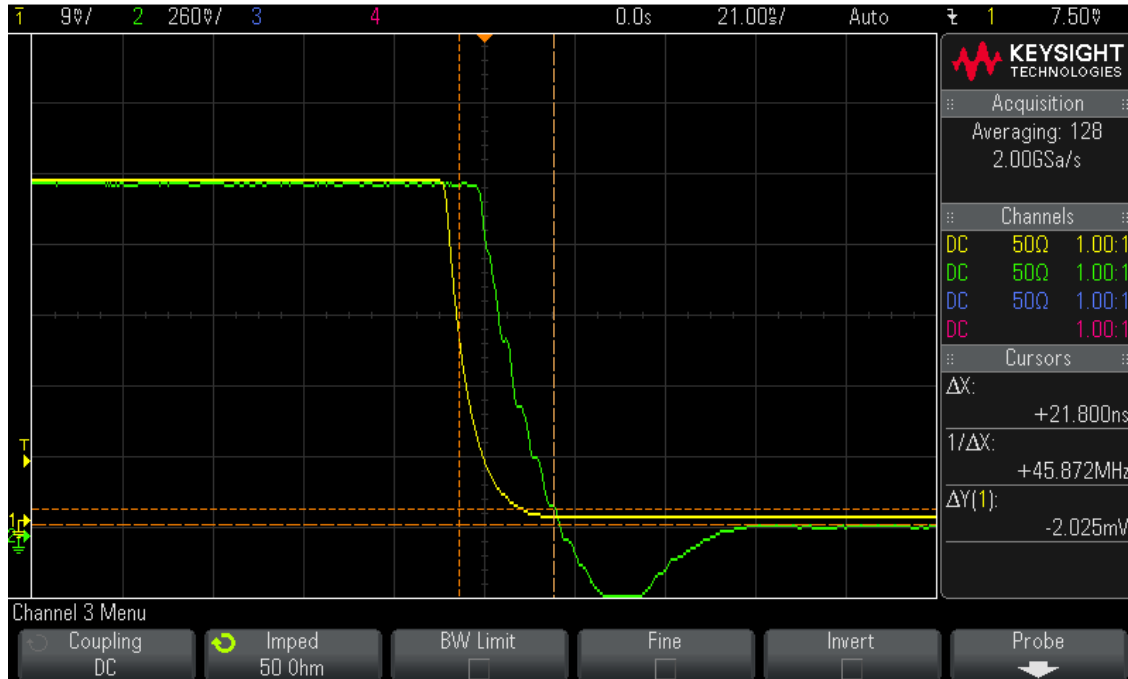


Full Pulse

**TYPICAL CHARACTERISTICS
ON
TD-1G12G-20DB-SFP**

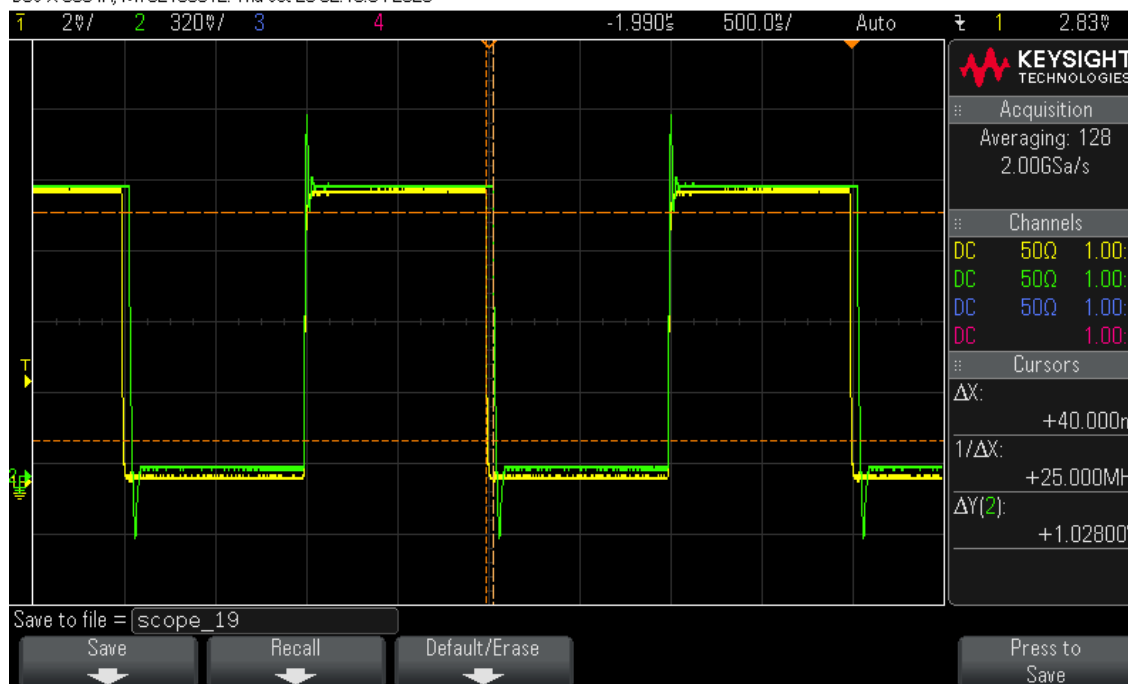
Response Time 6 GHz @ -25 dBm

DSO-X 3034A, MY52103312: Thu Oct 23 01:52:31 2025



Response
OFF

DSO-X 3034A, MY52103312: Thu Oct 23 02:18:54 2025



Full Pulse

**TYPICAL CHARACTERISTICS
ON
TD-1G12G-20DB-SFP**

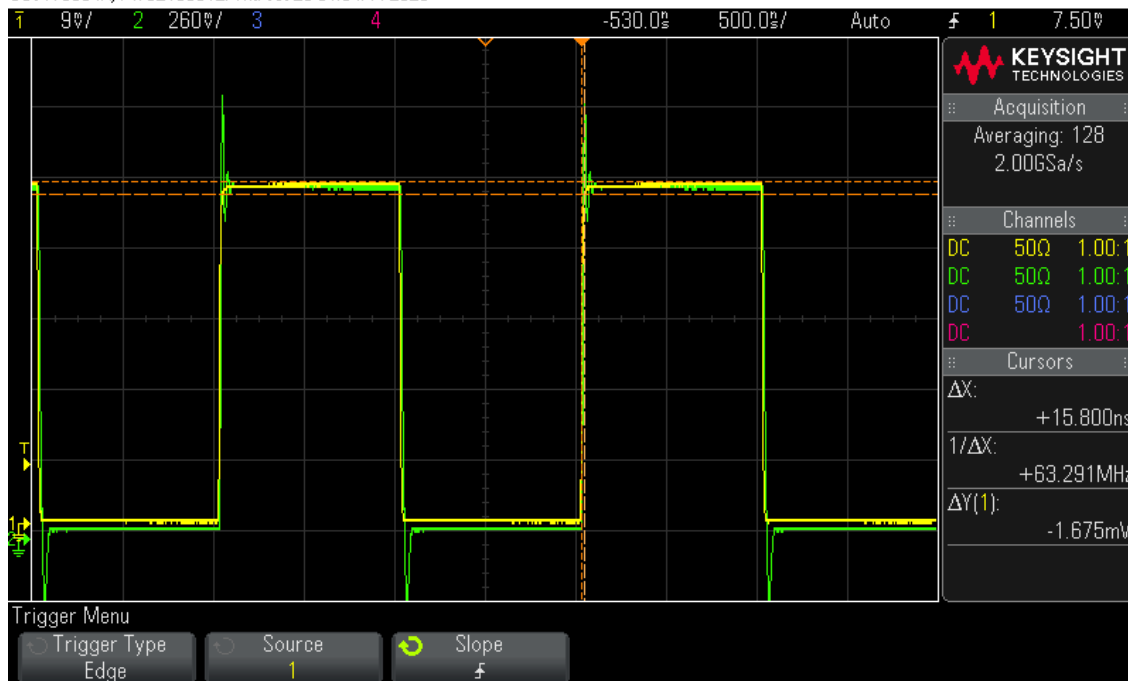
Response Time 6 GHz @ -25 dBm

DSO-X 3034A, MY52103312: Thu Oct 23 01:54:00 2025



Response
ON

DSO-X 3034A, MY52103312: Thu Oct 23 01:54:44 2025

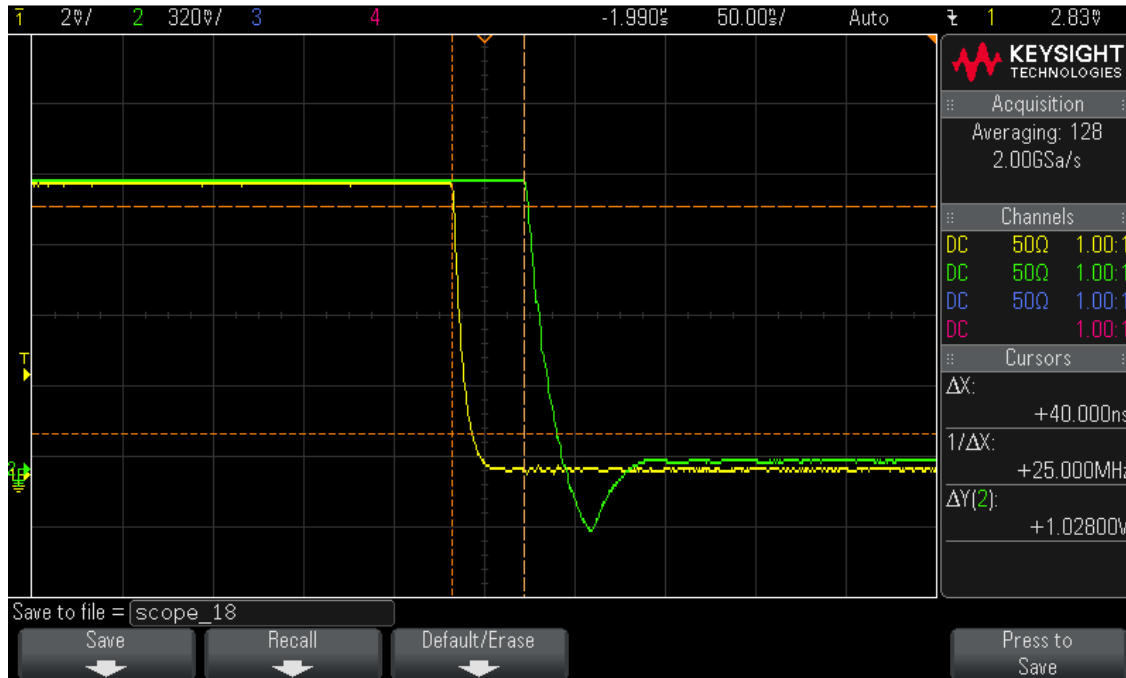


Full Pulse

**TYPICAL CHARACTERISTICS
ON
TD-1G12G-20DB-SFP**

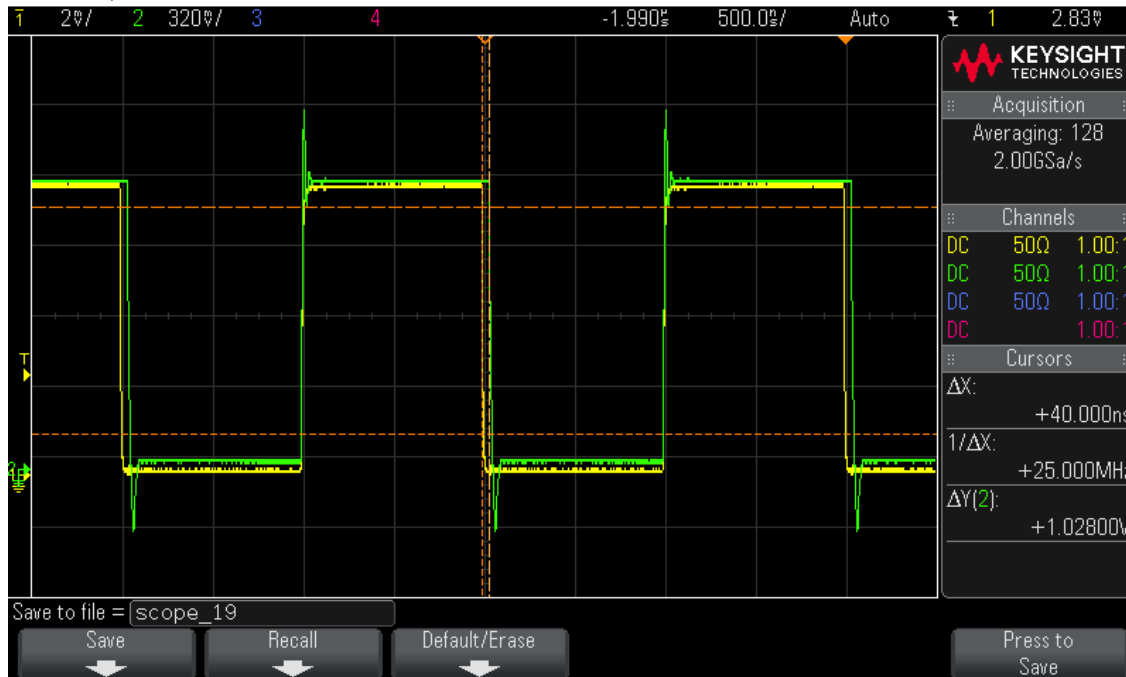
Response Time 6 GHz @ 0 dBm

DSO-X 3034A, MY52103312: Thu Oct 23 02:18:40 2025



Response
OFF

DSO-X 3034A, MY52103312: Thu Oct 23 02:18:54 2025

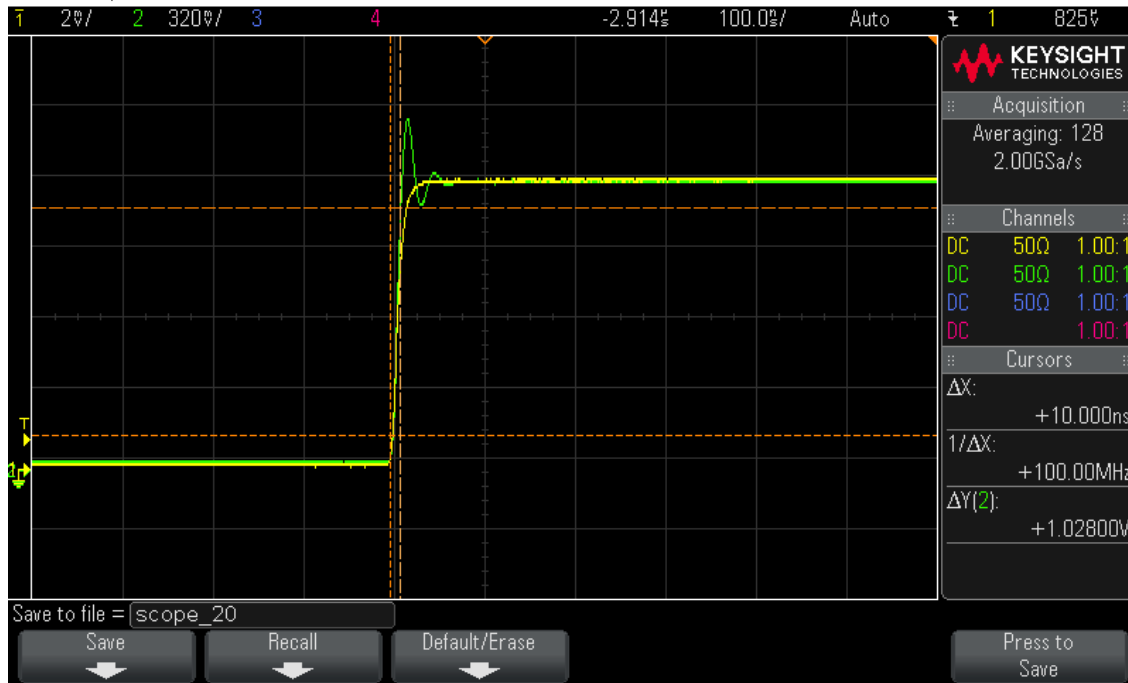


Full Pulse

**TYPICAL CHARACTERISTICS
ON
TD-1G12G-20DB-SFP**

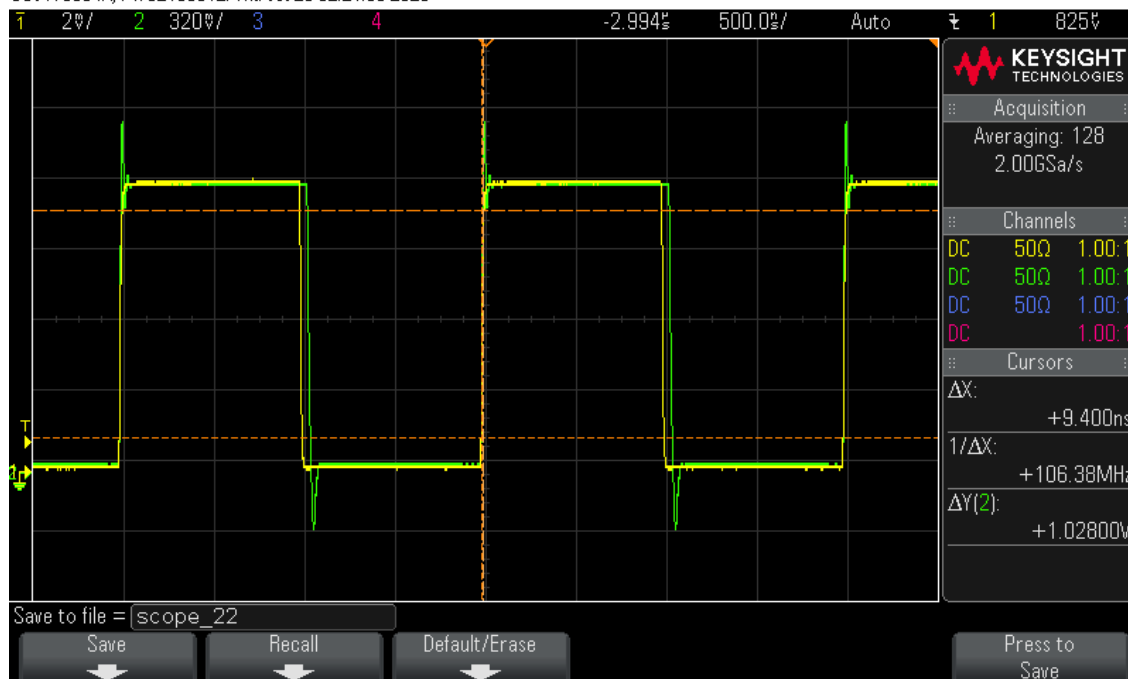
Response Time 6 GHz @ 0 dBm

DSO-X 3034A, MY52103312: Thu Oct 23 02:21:03 2025



Response
ON

DSO-X 3034A, MY52103312: Thu Oct 23 02:21:59 2025

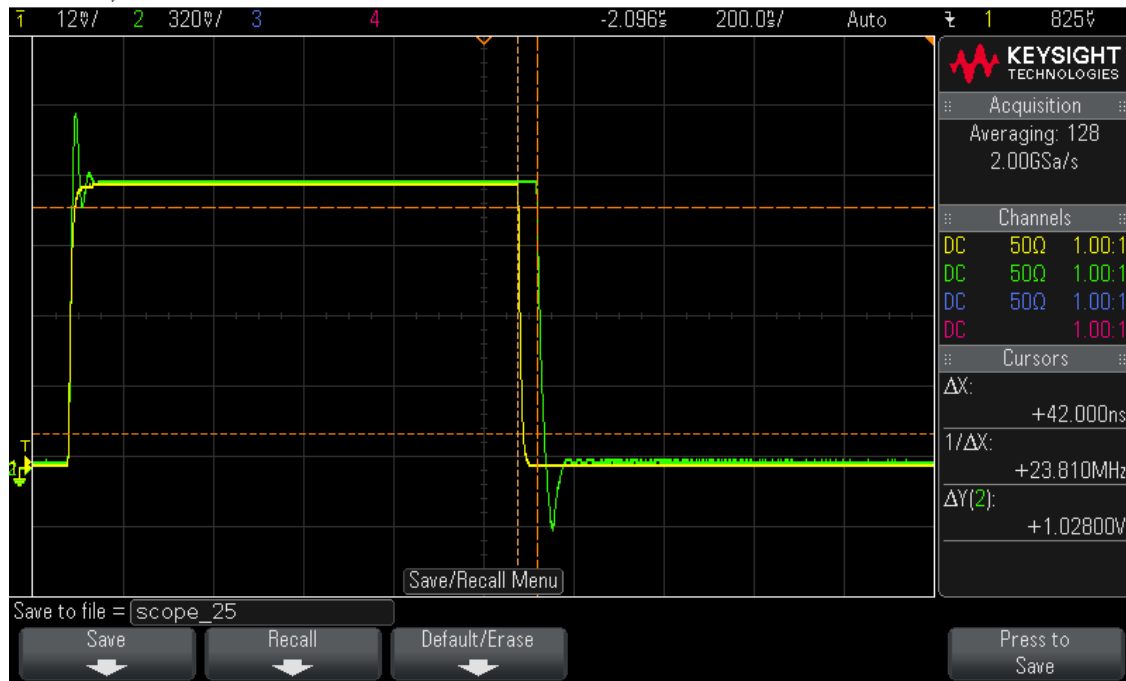


Full Pulse

**TYPICAL CHARACTERISTICS
ON
TD-1G12G-20DB-SFP**

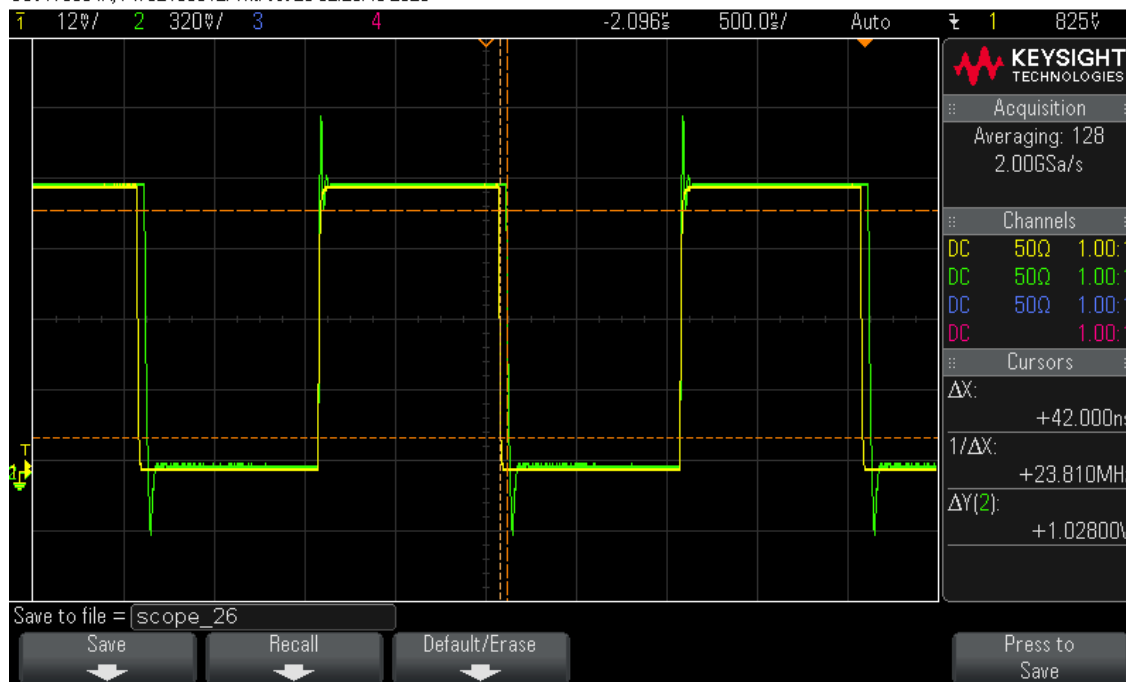
Response Time 6 GHz @ 10 dBm

DSO-X 3034A, MY52103312: Thu Oct 23 02:23:37 2025



Response
OFF

DSO-X 3034A, MY52103312: Thu Oct 23 02:23:43 2025

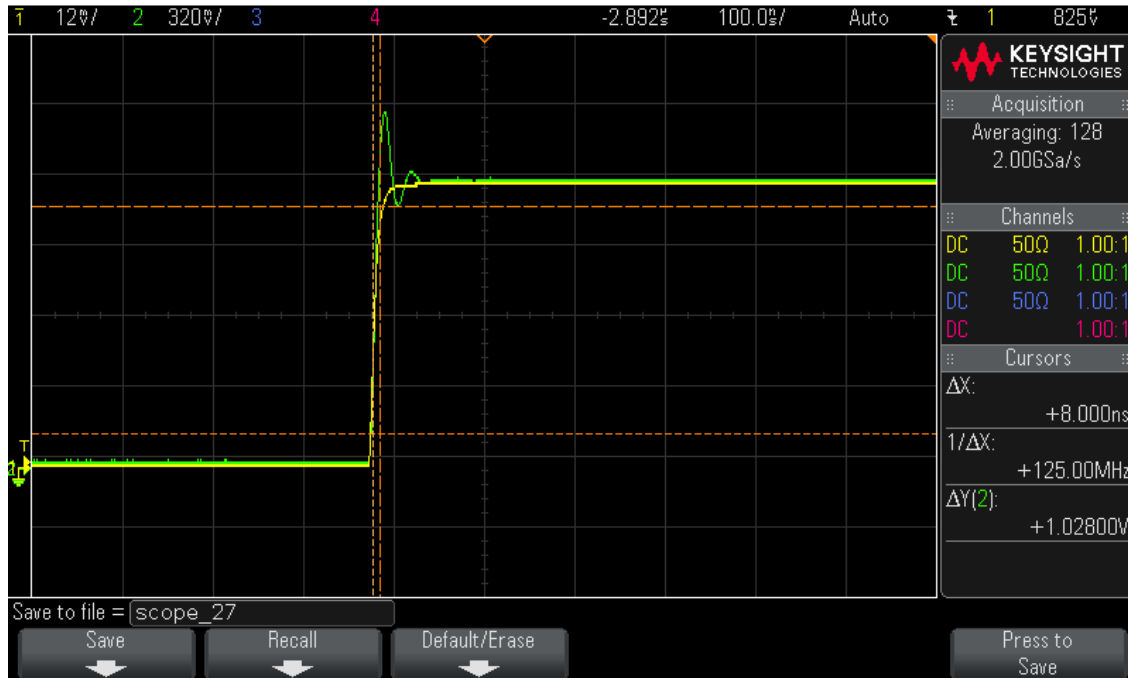


Full Pulse

**TYPICAL CHARACTERISTICS
ON
TD-1G12G-20DB-SFP**

Response Time 6 GHz @ 10 dBm

DSO-X 3034A, MY52103312: Thu Oct 23 02:24:28 2025



DSO-X 3034A, MY52103312: Thu Oct 23 02:24:35 2025

