



Typical Characteristics For DTA-0R4G18G-60-CD-1

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REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
A1		ORIGINAL RELEASE	9/5/19	
A2		ECN # 20-0050	03/11/20	
B1		ECN # 24-0310	10/30/24	

DESCRIPTION:
 PMI MODEL NUMBER DTA-0R4G18G-60-CD-1 IS A NON-REFLECTIVE 10 BIT PROGRAMMABLE 60 dB PIN DIODE ATTENUATOR WITH STEP RESOLUTION AS LOW AS 0.06 dB OVER THE FREQUENCY RANGE OF 0.4 TO 18.0 GHz. THIS MODEL IS OFFERED IN A SLIM LINE HOUSING MEASURING ONLY 0.5" HEIGHT.

SPECIFICATIONS:

- FREQUENCY: _____ 0.4 GHz TO 18.0 GHz
- MEAN ATTENUATION RANGE: _____ 60 dB
- INSERTION LOSS: _____ 4.8 dB MAX
- VSWR: _____ 2.0 :1 MAX
- FLATNESS UP TO:
 - 20 dB _____ ±1.0 dB TYP, ± 1.5 dB MAX
 - 40 dB _____ ±1.25 dB TYP, ± 1.75 dB MAX
 - 60 dB _____ ±3.0 dB TYP, ± 5.0 dB MAX
- ACCURACY OF ATTENUATION:
 - 0 dB TO 20 dB _____ ±1.0 dB MAX
 - 20 dB TO 40 dB _____ ±1.5 dB MAX
 - 40 dB TO 60 dB _____ ±2.0 dB MAX
- MINIMUM ATTENUATION STEP: _____ 0.06 dB
- OPERATING POWER: _____ 15 dBm MIN
- SURVIVAL POWER: _____ 1W Average from -65°C to +25°C
- SWITCHING TIME:
 - ON TIME _____ 1.0 us MAX
 - OFF TIME _____ 0.5 us MAX
- DC POWER SUPPLY: _____ +12 to 15V @ 150 mA MAX
- CONNECTORS: _____ 2 SMA & 15 PIN Micro-D-Female (ITT Cannon MDM15SSP or similar)
- WEIGHT: _____ 3.0 oz (85 gm) Approximate
- FINISH: _____ PAINTED BLUE

PIN NO:	J3 PIN FUNCTIONS
1	2dB
2	1dB
3	0.5dB
4	0.25dB
5	GND
6	0.13 dB
7	0.06 dB (LSB)
8	GND
9	Not Used
10	Not Used
11	+12 to 15V/DC
12	32dB (MSB)
13	16dB
14	8dB
15	4dB

PMI CONFIDENTIAL AND PROPRIETARY

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 ISO 9001 CERTIFIED

APPROVALS	DATE	TITLE		
DRAWN: NJA	9/5/19	PRODUCT FEATURE DTA-0R4G18G-60-CD-1		
CHECKED:		SIZE: A	PSGM NO.: 05XQ0	DWG NO.: 27037160
ISSUED:		SCALE: N:S		SHEET: 1 OF 1

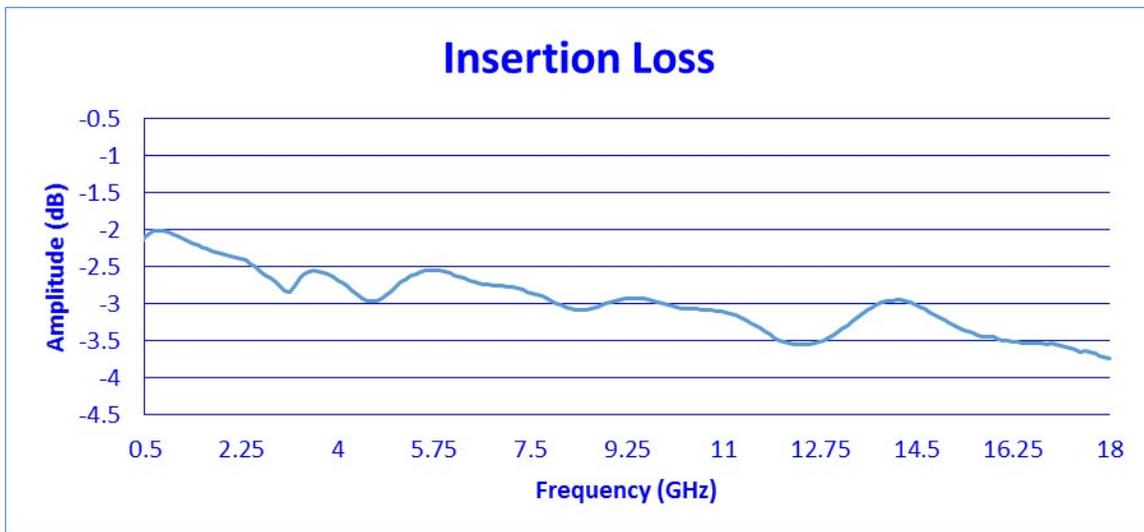
ALL DIMENSIONS ARE IN INCHES
 TOLERANCES:
 .XXX ±0.020
 X.XXX ±0.010

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION



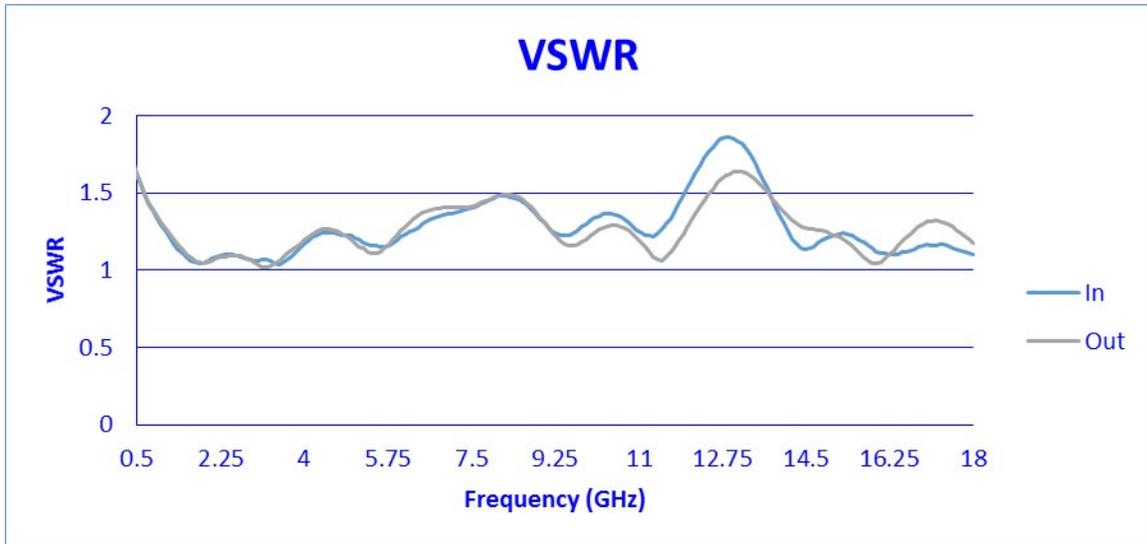
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TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	RESULTS	QA QC
1	Frequency Range:	0.4 GHz – 18 GHz	0.4 GHz – 18 GHz	
2	Insertion Loss:	4.8 dB Max.	0 dB See Plot	
3	VSWR:	2.0:1 Max.	#DIV/0!	
4	Flatness to 20 dB:	± 1.0 dB Typ., ± 1.5 dB MAX	±0 dB See Plot	
6	Flatness to 40 dB:	± 1.25 dB Typ., ± 1.75 dB MAX	±0 dB See Plot	
7	Flatness to 60 dB:	± 3.0 dB Typ., ± 5.0 dB MAX	±0 dB See Plot	
8	Accuracy of Attenuation 0 to 20 dB:	± 1.0 dB MAX	±0 dB See Plot	
9	Accuracy of Attenuation 20 to 40 dB:	± 1.5 dB MAX	±0 dB See Plot	
10	Accuracy of Attenuation 40 to 60 dB:	± 2.0 dB MAX	±0 dB See Plot	
11	Switching Speed:	1.0 µs Max. On 0.5 µs Max. Off	< 1.0 us See Typical Characteristics	
12	DC Supply:	+15VDC @ 150 mA	112 mA	



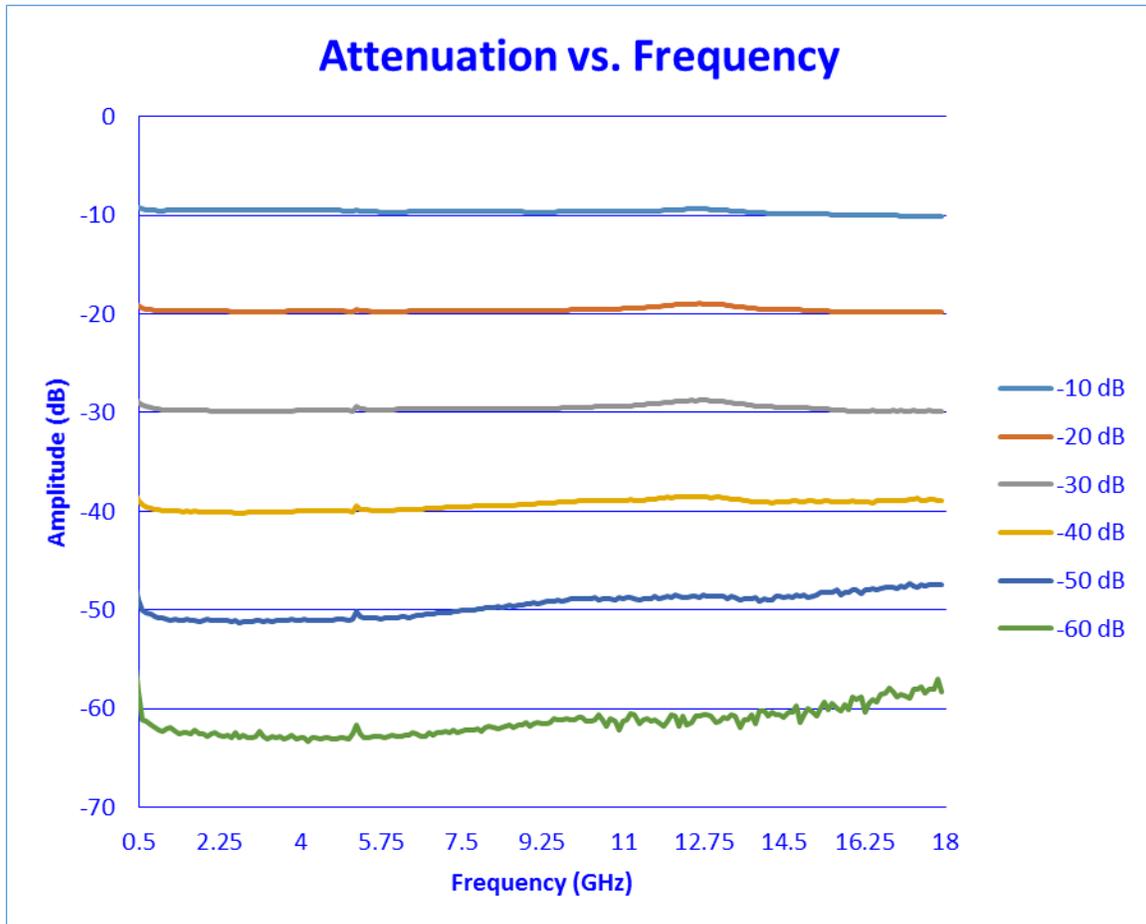


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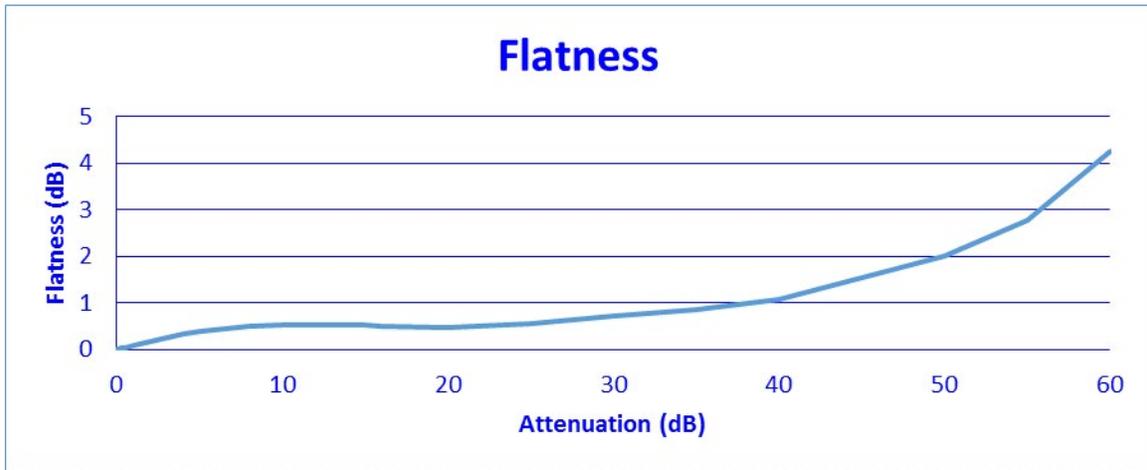
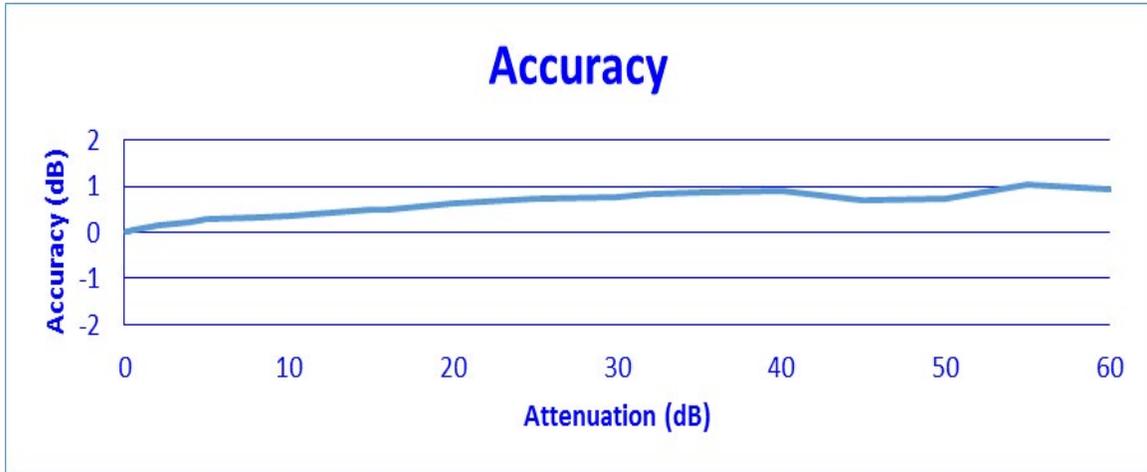


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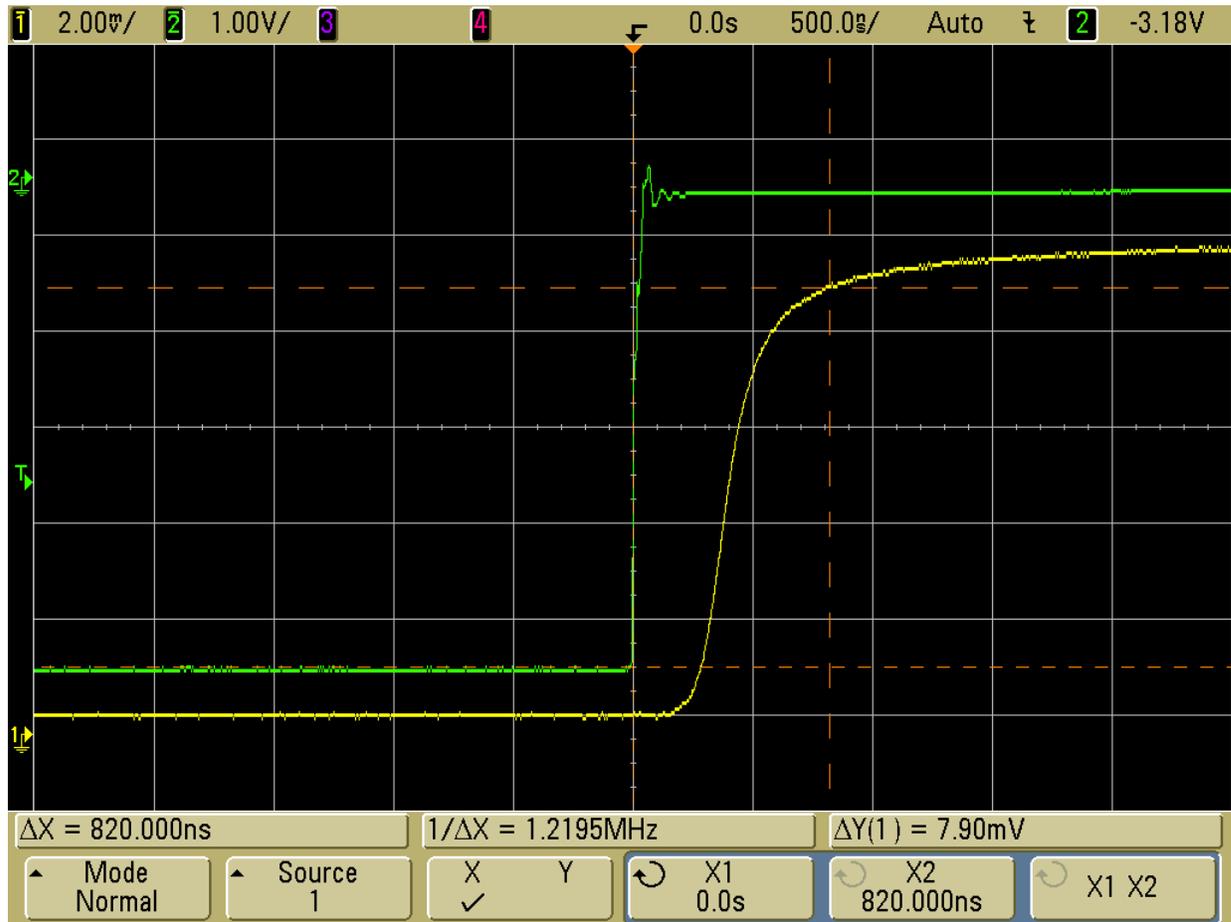
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Typical Characteristics For DTA-0R4G18G-60-CD-1

Delay On Time



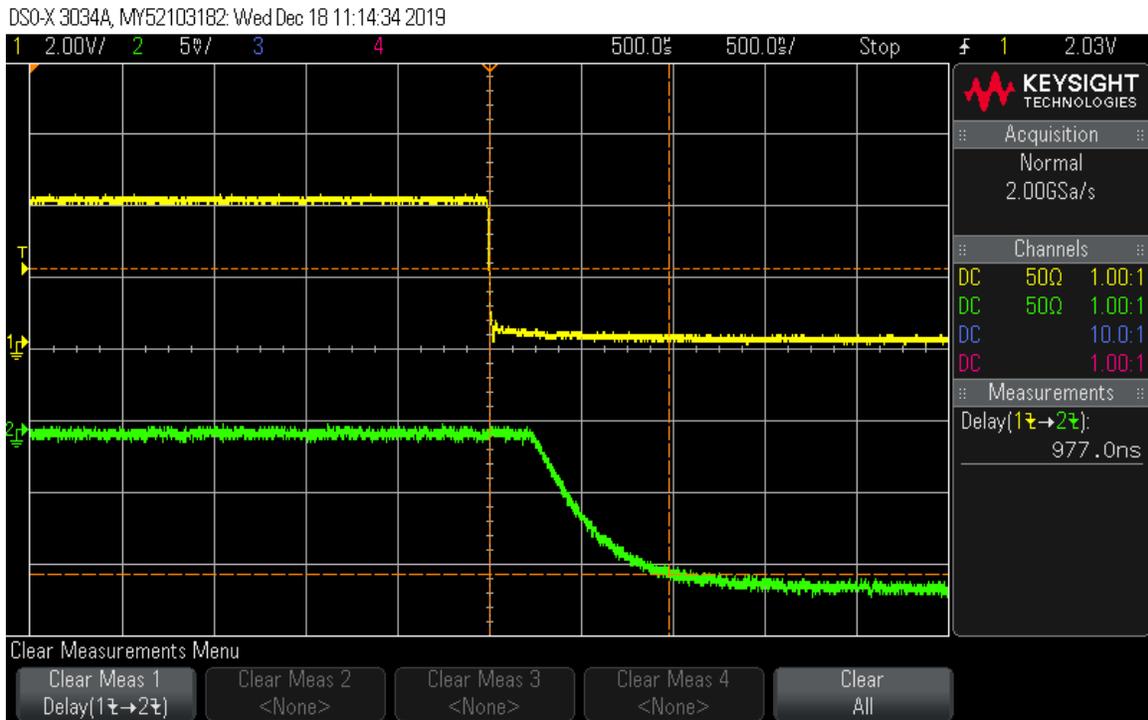
Channel 1 (Yellow): TTL Input from Signal Generator

Channel 2 (Green): RF Output



Typical Characteristics For DTA-0R4G18G-60-CD-1

Delay Off Time



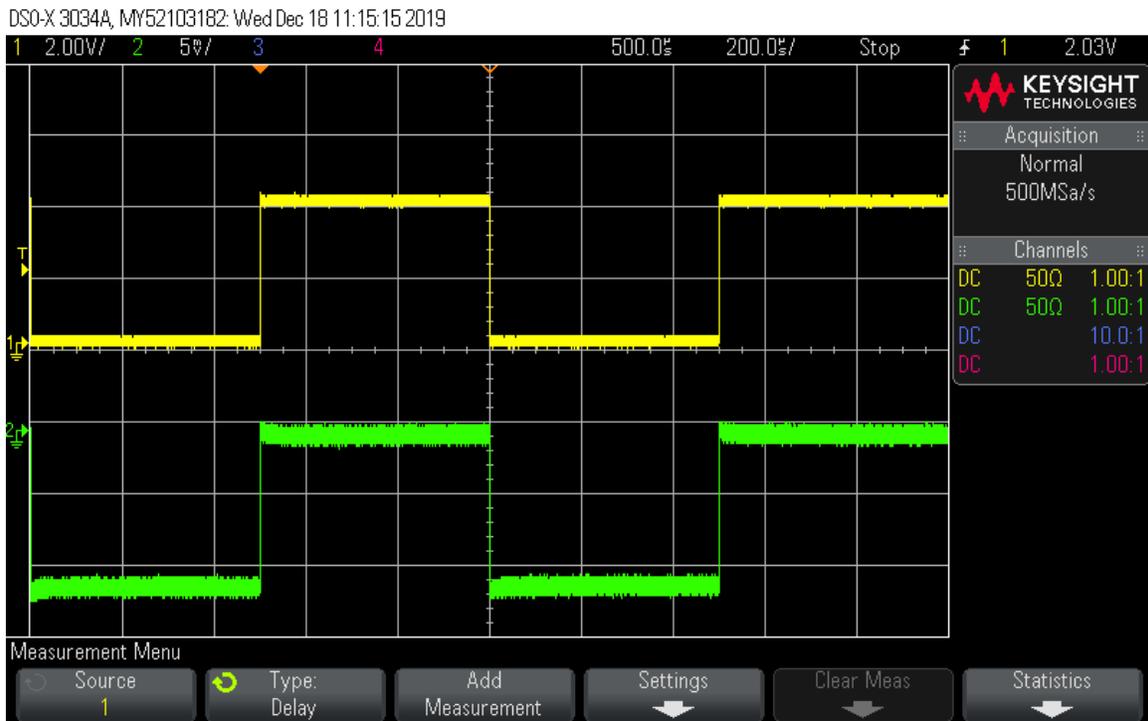
Channel 1 (Yellow): TTL Input from Signal Generator

Channel 2 (Green): RF Output



Typical Characteristics For DTA-0R4G18G-60-CD-1

Full Pulse



Channel 1 (Yellow): TTL Input from Signal Generator

Channel 2 (Green): RF Output