



Typical Characteristics on P1T-2G6G-25-6NS-ECL

PMI MODEL NUMBER P1T-2G6G-25-6NS-ECL IS AN ULTRA HIGH SPEED SINGLE POLE SINGLE THROW SWITCH COVERING 2 TO 6 GHz. THE ISOLATION IS BETTER THAN 25dB AND THE SWITCHING SPEED IS 6 ns USING EXTERNAL ECL CONTROLS. NO ADDITIONAL POWER SUPPLY IS REQUIRED.



April 3, 2019
Designed By: Dr. Ashok (Ash) Gorwara
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**Typical Characteristics
on
P1T-2G6G-25-6NS-ECL**

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Typical Characteristics on P1T-2G6G-25-6NS-ECL

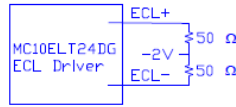
Product Feature

DESCRIPTION

PMI MODEL NUMBER P1T-2G6G-25-6NS-ECL IS AN ULTRA HIGH SPEED SINGLE POLE SINGLE THROW SWITCH COVERING 2 GHz TO 6 GHz. THE ISOLATION IS BETTER THAN 25 dB AND THE SWITCHING SPEED IS 6 ns USING EXTERNAL ECL CONTROLS. NO ADDITIONAL POWER SUPPLY IS REQUIRED.

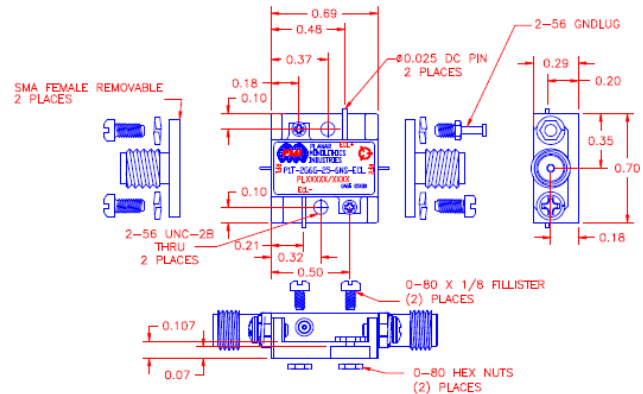
SPECIFICATIONS

- FREQUENCY RANGE: 2 TO 6 GHz
- INSERTION LOSS: 5 dB MAX
- ISOLATION: 25 dB MIN
- VSWR (IN/OUT): 2:1 MAX
- SWITCHING SPEED: 6 ns TYP
- CONTROL: ECL CONTROL
ECL+ "1", ECL- "0" INSERTION LOSS
ECL+ "0", ECL- "1" ISOLATION
- RECOMMENDED DRIVER CIRCUIT: MC10ELT24DG OR EQUIVALENT ECL DRIVER WITH 50 OHM TERMINATIONS TO -2V ON ECL+ AND ECL- KEEP CONNECTIONS TO SWITCH SHORT
- CONNECTORS: SMA (F) REMOVABLE
- SIZE: (L) 0.69" X (W) 0.70" X (H) 0.29"
EXCLUDING CONNECTORS
- FINISH: GOLD PLATED

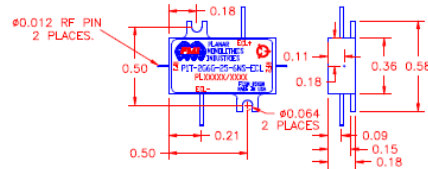


REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	3/29/19	
	B1	ECN # 25-0081	3/17/25	

HOUSING WITH CARRIER



HOUSING WITHOUT CARRIER (SURFACE MOUNT)



PMI CONFIDENTIAL AND PROPRIETARY

ENVIRONMENTAL RATINGS

- TEMPERATURE: -40°C TO +85°C (OPERATING)
-40°C TO +85°C (STORAGE)
- HUMIDITY: MIL-STD-202F, METHOD 103B COND. B
- SHOCK: MIL-STD-202F, METHOD 213B COND. B
- ALTITUDE: MIL-STD-202F, METHOD 105C COND. B
- TEMPERATURE CYCLE: MIL-STD-202F, METHOD 107D COND. A

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

ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
X.XX ±0.02
X.XXX ±0.010

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ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE		
DRAWN: DPD		3/29/19	PRODUCT FEATURE P1T-2G6G-25-6NS-ECL		
CHECKED:			SIZE: A	PSGM NO.: 05XQ0	DWG NO.: 27035639
ISSUED:			SCALE: N:S		REV. B1
				SHEET	1 OF 1

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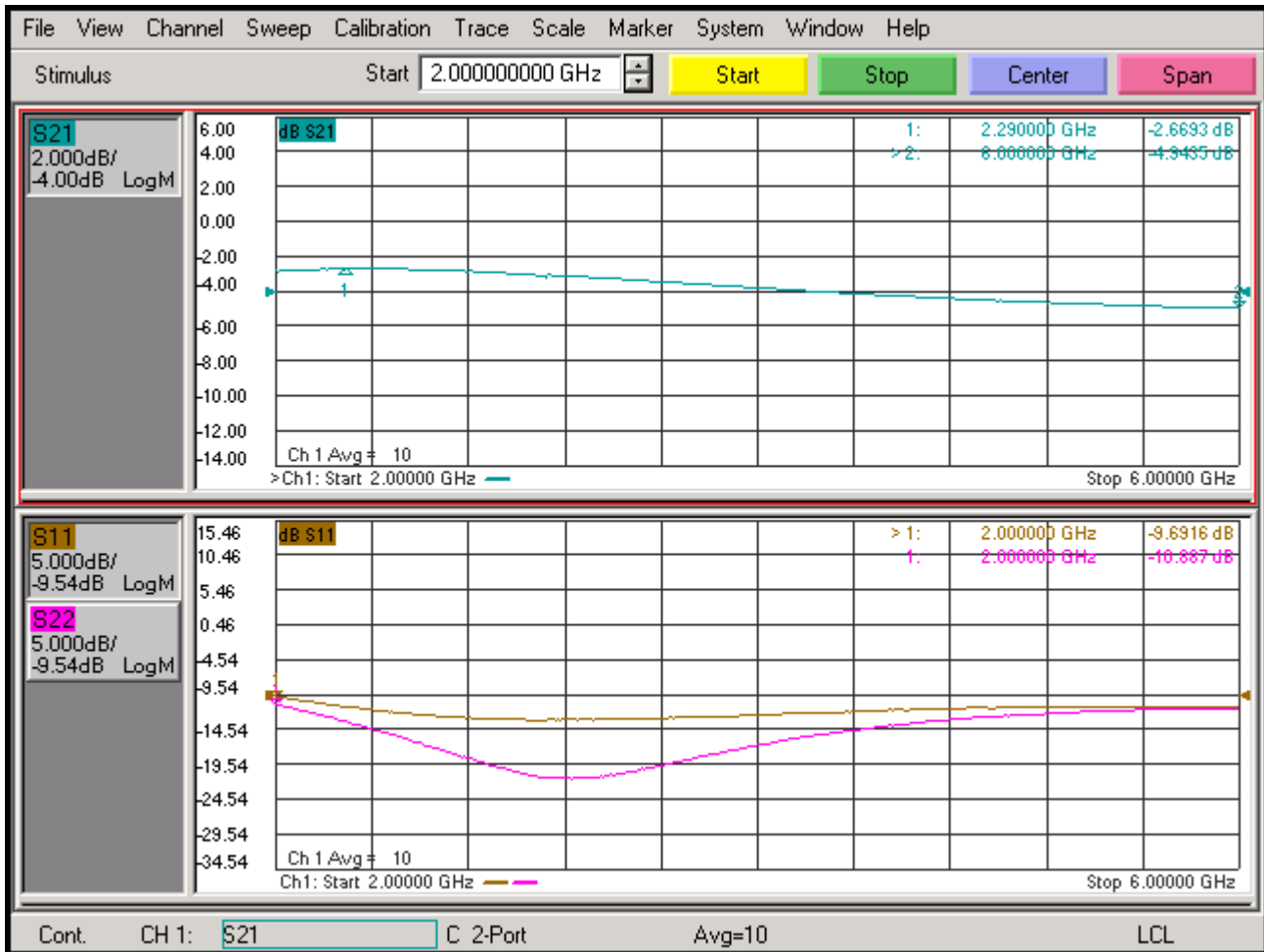
Summary Test Data

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	2 GHz TO 6 GHz	2 GHz TO 6 GHz	
2	Insertion Loss:	5 dB Max	4.9 dB	
3	VSWR:	2 : 1 Max	1.98 : 1	
4	Isolation:	25 dB Min	29.2 dB	
5	Switching Speed	6 ns Typ	6 ns See Plot	
6	Control	ECL+ "1" ECL- "0" : Insertion Loss ECL+ "0" ECL- "1" : Isolation	Pass	



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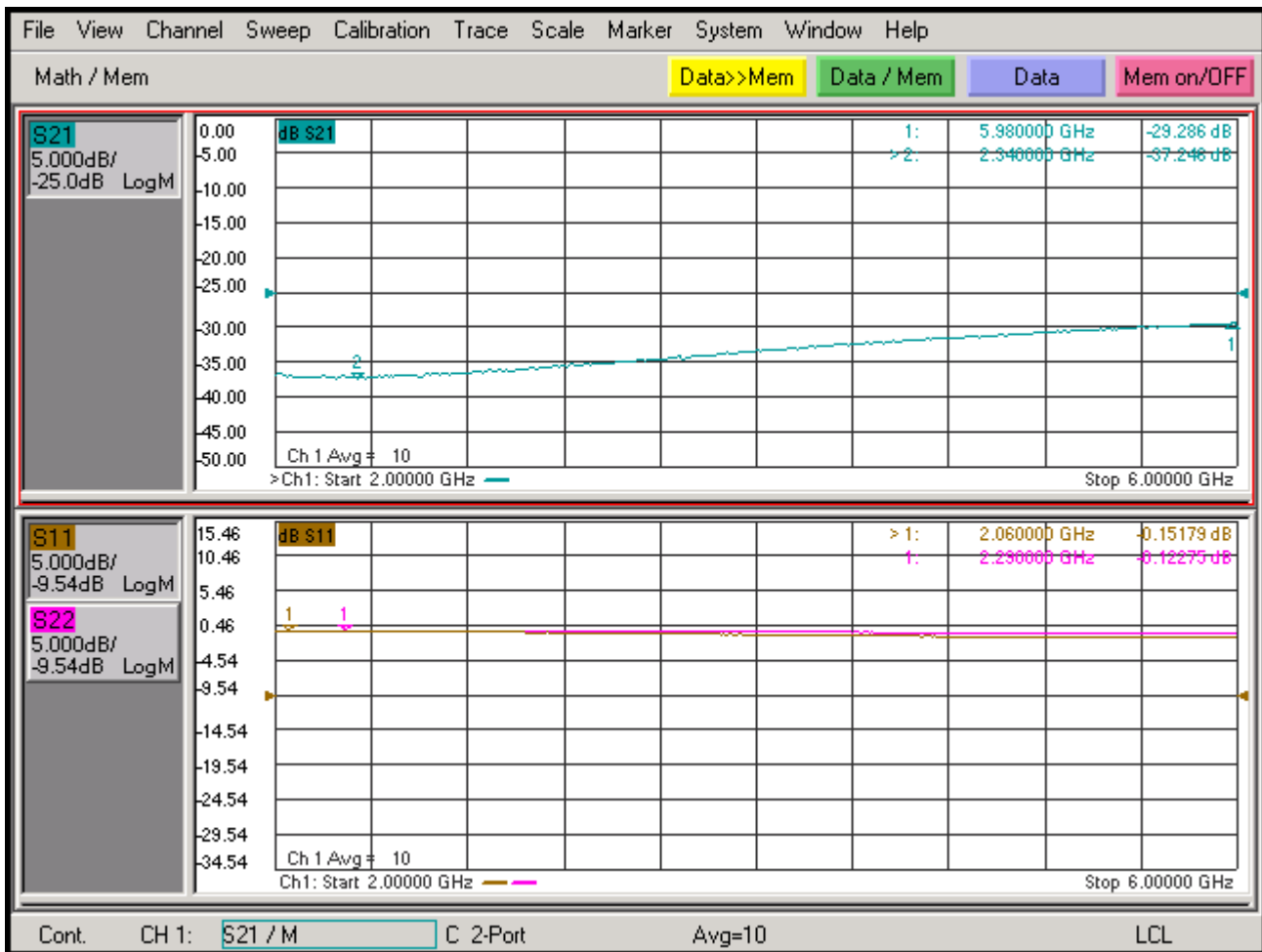
Insertion Loss and Return Loss





Typical Characteristics on P1T-2G6G-25-6NS-ECL

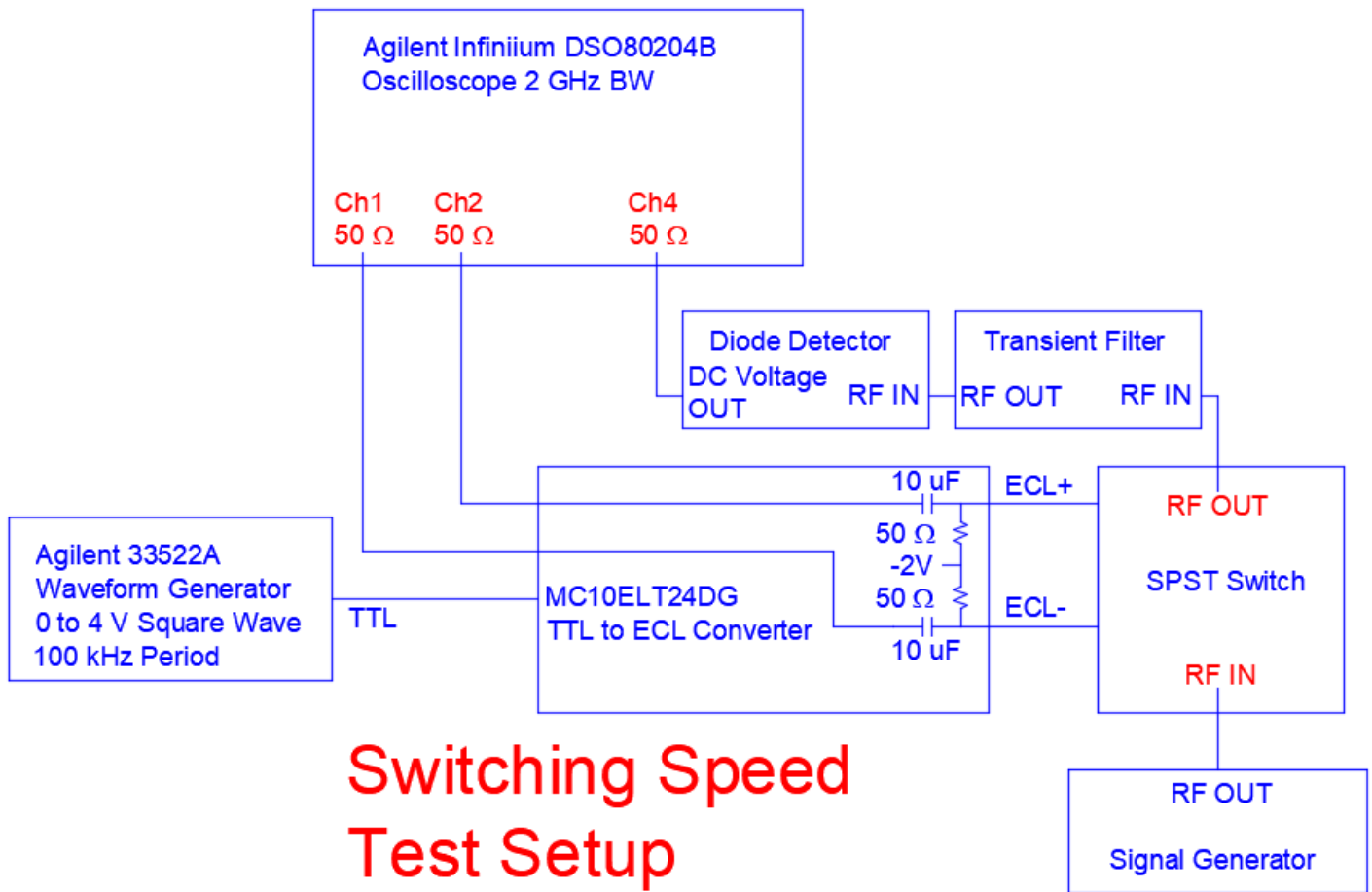
Isolation





Typical Characteristics on P1T-2G6G-25-6NS-ECL

Switching Speed Setup





Typical Characteristics on P1T-2G6G-25-6NS-ECL

RF Output Pulse with ECL Signals (2 GHz Scope)



RF Output (Pink Trace) – With Video Transient Filter
Clean Pulse, No Ringing

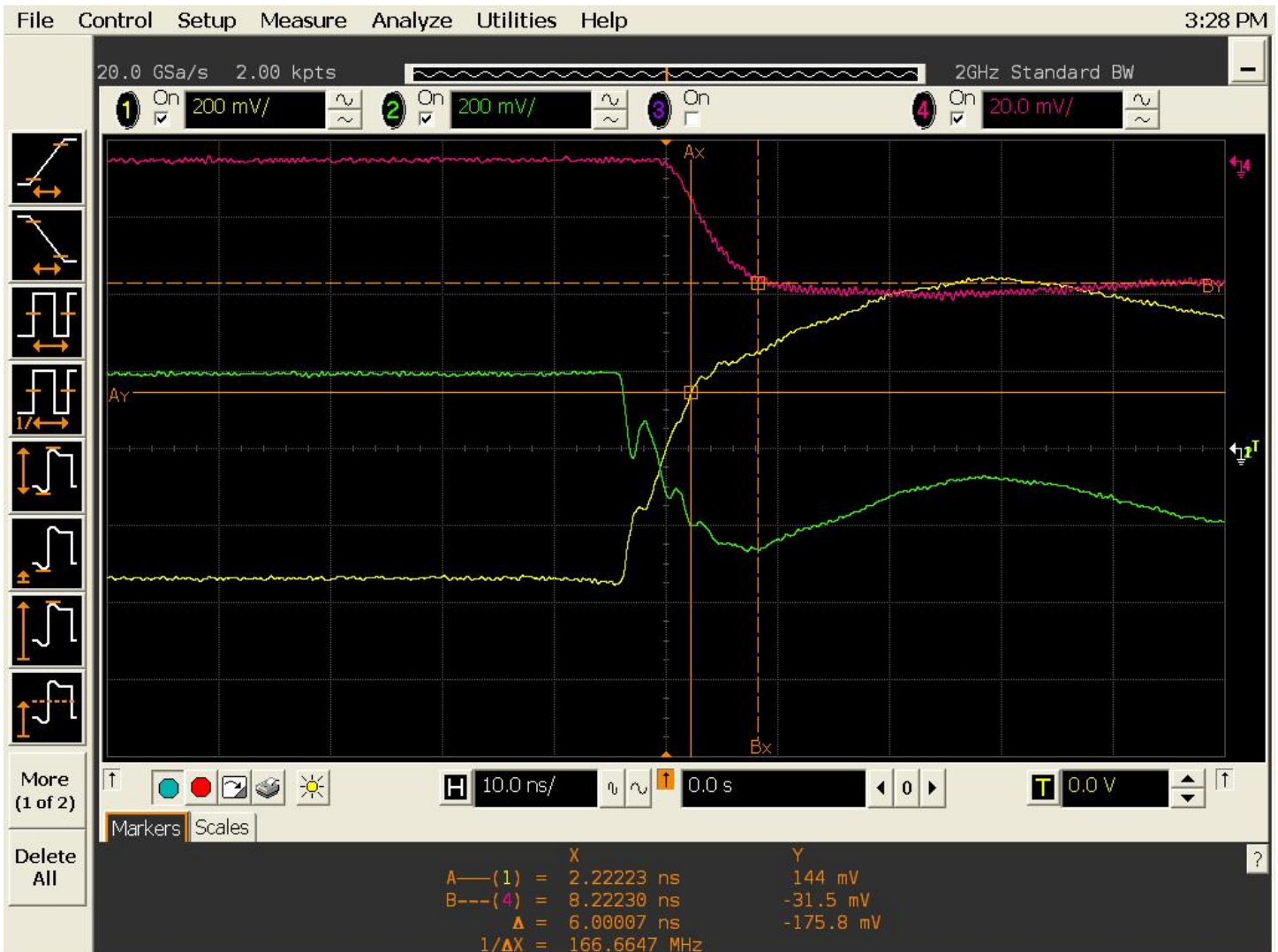
ECL Signals – Through 10 μ F DC Blocking Capacitor into 50 ohm terminated scope

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Typical Characteristics on P1T-2G6G-25-6NS-ECL

RF On Time



RF Output (Pink Trace) – With Video Transient Filter

ECL Controls (Green and Yellow Traces)

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