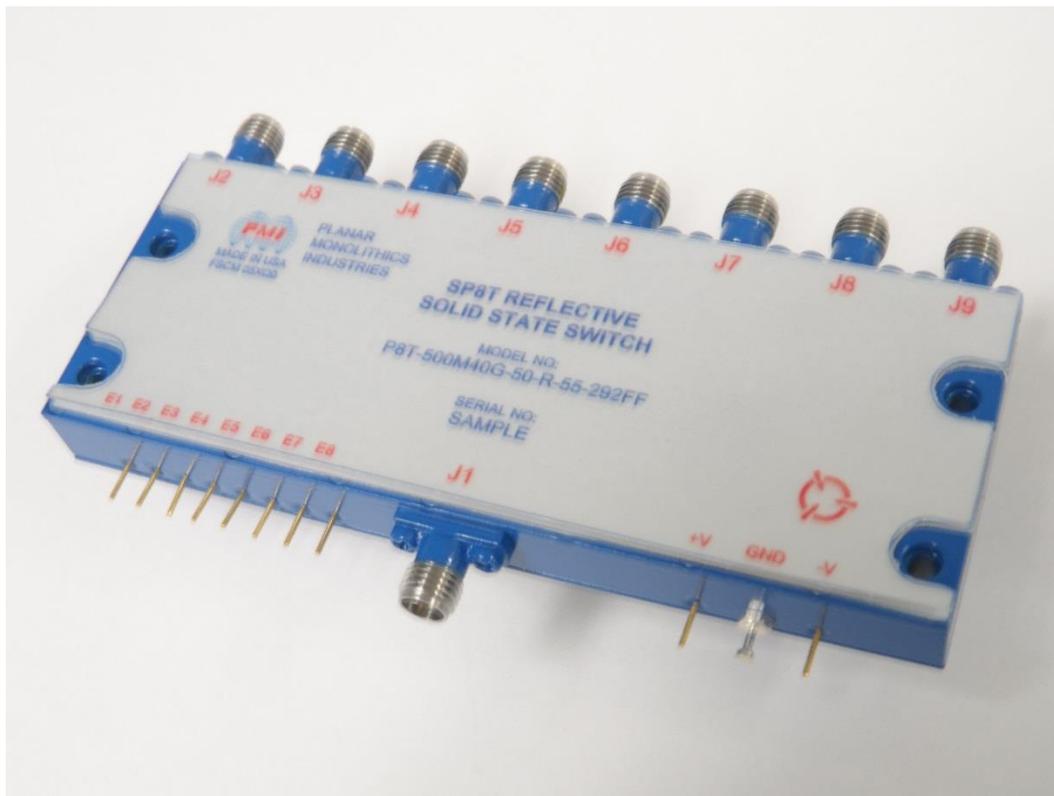




**TYPICAL CHARACTERISTICS
ON
P8T-500M40G-50-R-55-292FF**

V000977F062920161403

THE MODEL P8T-500M40G-50-R-55-292FF IS A HIGH SPEED, SINGLE POLE, EIGHT THROW, REFLECTIVE SWITCH CAPABLE OF SWITCHING WITHIN 50ns. THE FREQUENCY RANGE IS 0.5 TO 40.0 GHz AND THIS SWITCH HAS OVER 45dB OF ISOLATION.



July 01, 2016

DESIGNED BY: PMI ENGINEERING

TESTED & REPORTED BY: Kevin Mansfield / H. Gonzales

7311-F Grove Road Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731
Email: sales@pmi-rf.com



**TYPICAL CHARACTERISTICS
ON
P8T-500M40G-50-R-55-292FF**

V000977F062920161403

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TYPICAL CHARACTERISTICS ON P8T-500M40G-50-R-55-292FF

V000977F062920161403

DESCRIPTION

THE MODEL P8T-500M40G-50-R-55-292FF IS A HIGH SPEED, SINGLE POLE, EIGHT THROW, REFLECTIVE SWITCH CAPABLE OF SWITCHING WITHIN 50ns. THE FREQUENCY RANGE IS 0.5 TO 40.0 GHz AND THIS SWITCH HAS OVER 45dB OF ISOLATION.

SPECIFICATIONS

- FREQUENCY RANGE: 0.5 TO 40.0 GHz
- ISOLATION: 45dB MIN
- INSERTION LOSS:9dB TYP
- VSWR IN/OUT: 3.0:1 TYP.
- OPERATING INPUT POWER: . . . +20dBm CW
- SWITCHING SPEED: 50 ns TYP.
- DC VOLTAGE AND CURRENT: . . +5VDC @ 100mA
 -5VDC @ 50mA
- CONTROL SIGNAL: EIGHT LINE TTL
 - E1 CONTROLS J1-J2
 - E2 CONTROLS J1-J3
 - E3 CONTROLS J1-J4
 - E4 CONTROLS J1-J5
 - E5 CONTROLS J1-J6
 - E6 CONTROLS J1-J7
 - E7 CONTROLS J1-J8
 - E8 CONTROLS J1-J9
- CONNECTORS: 2.92mm (F) REMOVABLE
- FINISH: BLUE EPOXY POLIMIDE COATING IAW MIL-C-22750, TYPE I OVER EPOXY POLIMIDE PRIMER IAW MIL-P-23377, TYPE I, CLASS 1 OR 3.
- SIZE: 4.0" X 1.5" X 0.4"

ENVIRONMENTAL RATINGS

- TEMPERATURE: -40°C TO +85°C (OPERATING)
 -55°C TO +125°C (STORAGE)

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

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

PMI CONFIDENTIAL AND PROPRIETARY

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	1	ORIGINAL RELEASE	01/18/16	

PLANAR MONOLITHICS INDUSTRIES, INC.
 7311-F GROVE ROAD
 FREDERICK, MARYLAND 21704 USA
 TEL: (301)-662-5019, FAX: (301)-662-1731
 WEB: www.pmi-rf.com, EMAIL: sales@pmi-rf.com
 ISO 9001 CERTIFIED

APPROVALS	DATE	TITLE		
DRAWN <i>S. Thomas</i>	01/18/16	PRODUCT FEATURE P8T-500M40G-50-R-55-292FF		
CHECKED		SIZE	FROM NO.	DWG NO.
		A	05XQ0	27027701
ISSUED		SCALE	N/S	SHEET 1 OF 1



**TYPICAL CHARACTERISTICS
ON
P8T-500M40G-50-R-55-292FF**

V000977F062920161403

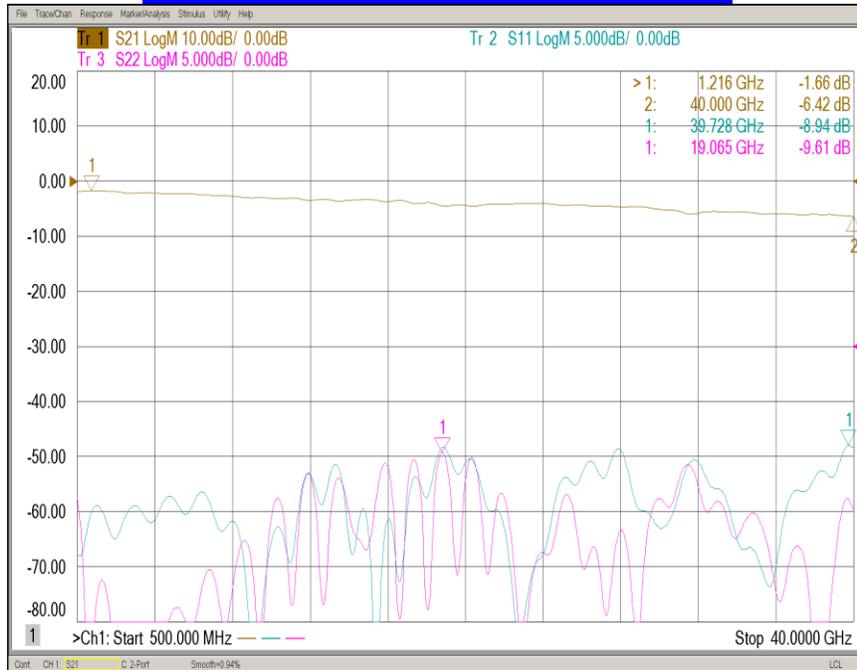
TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	0.5 – 40 GHz	0.5 – 40 GHz See Plot	
2	Insertion Loss:	9 dB Typ.	6.42dB See Plot	
3	Isolation:	45 dB Min.	60.80dB See Plot	
4	VSWR : In/Out	3.0:1 Typ	Input 2.52:1 Output 2.64:1 See Plot	
5	Switching Speed:	50 ns Typ.	30ns See Plot	
6	Operating Input Power:	+20dBm CW	Pass	
7	DC Supply:	+5VDC @ 100 mA Typ -5VDC @ 50 mA Typ	+5VDC @ 68mA -5VDC @ 10mA	
8	Control Signal:	EIGHT LINE TTL: "0" ISOLATION "1" INSERTION LOSS E1: J1-J2 E2: J1-J3 E3: J1-J4 E4: J1-J5 E5: J1-J6 E6: J1-J7 E7: J1-J8 E8: J1-J9	Pass	



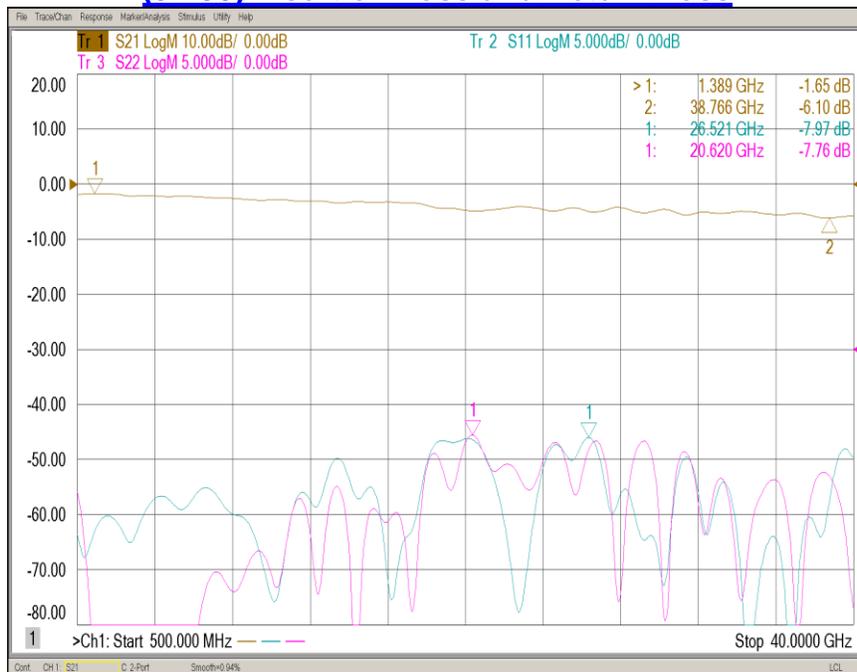
TYPICAL CHARACTERISTICS ON P8T-500M40G-50-R-55-292FF

V000977F062920161403

(J1-J2) Insertion Loss and Return Loss



(J1-J3) Insertion Loss and Return Loss



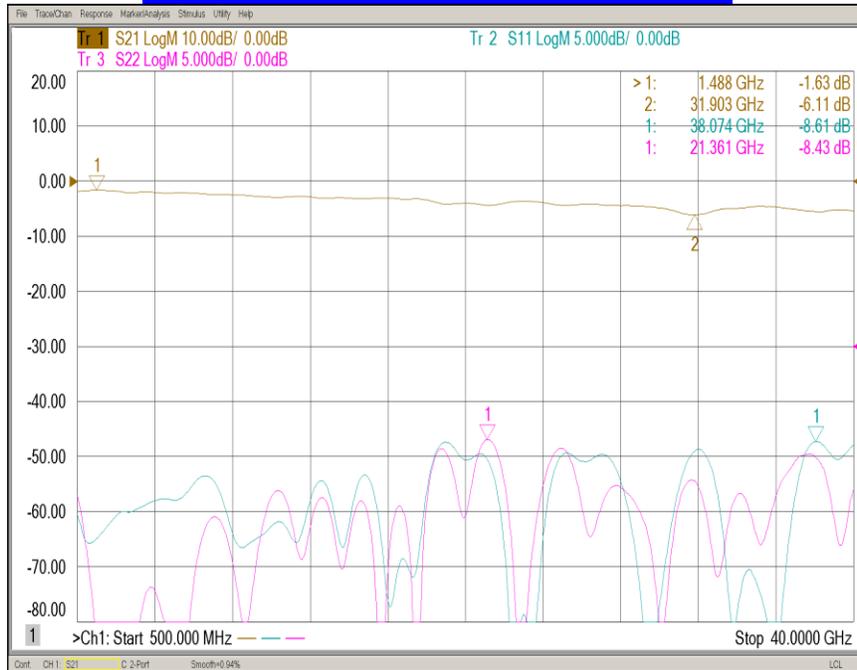
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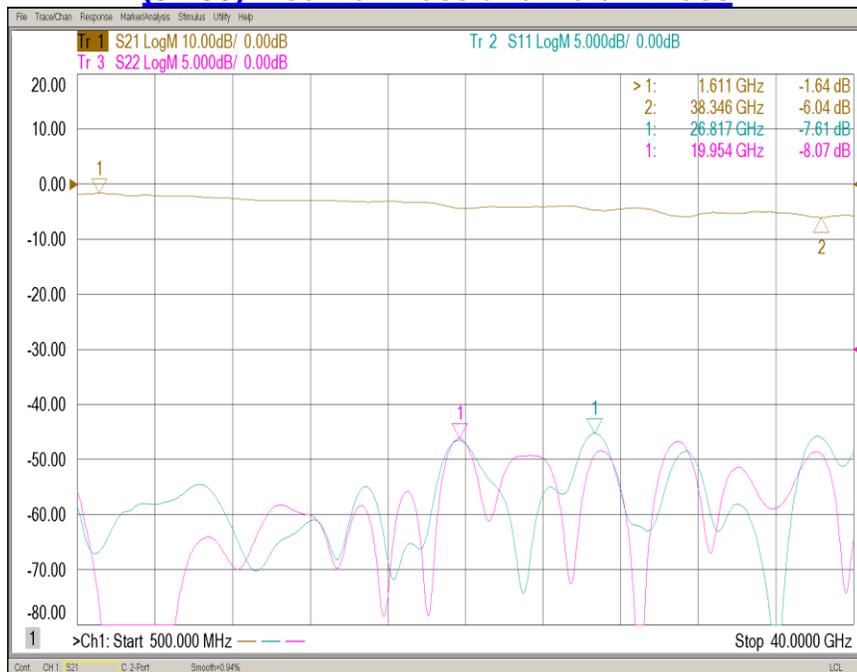
TYPICAL CHARACTERISTICS ON P8T-500M40G-50-R-55-292FF

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(J1-J4) Insertion Loss and Return Loss



(J1-J5) Insertion Loss and Return Loss



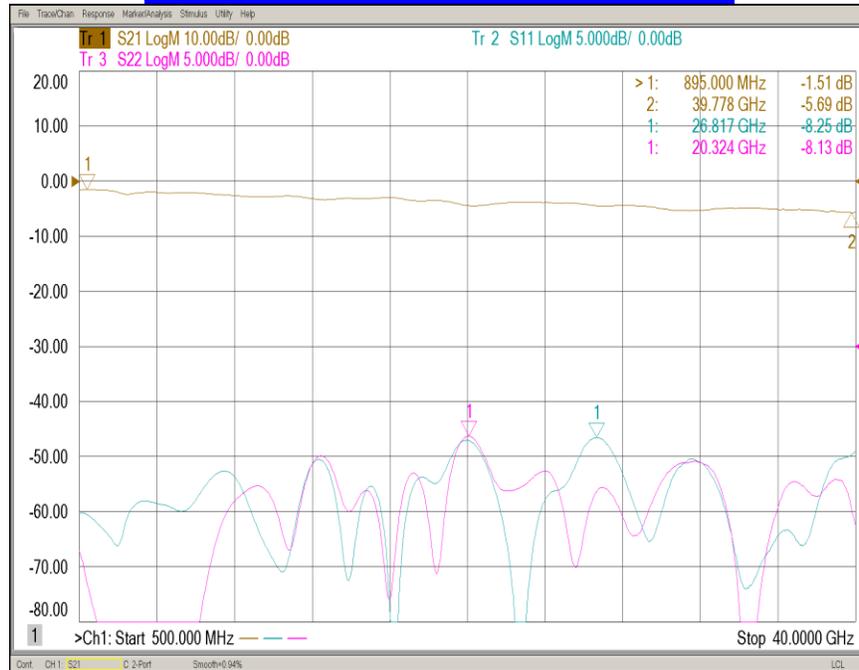
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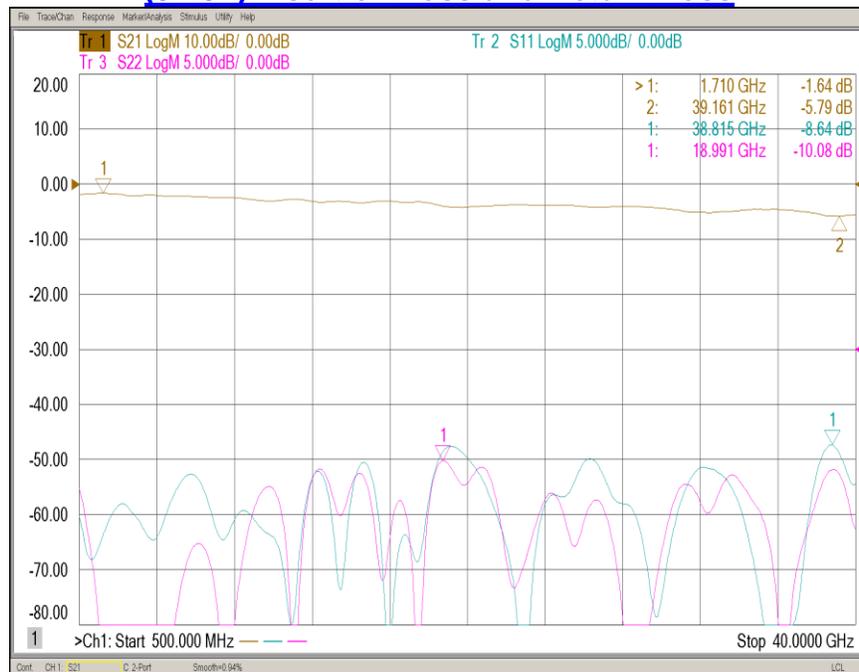
TYPICAL CHARACTERISTICS ON P8T-500M40G-50-R-55-292FF

V000977F062920161403

(J1-J6) Insertion Loss and Return Loss



(J1-J7) Insertion Loss and Return Loss



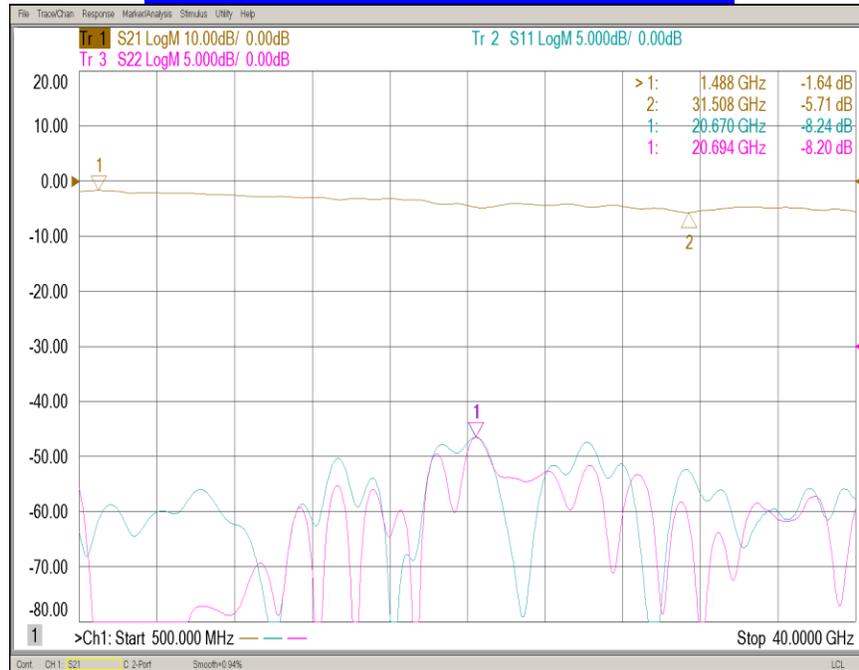
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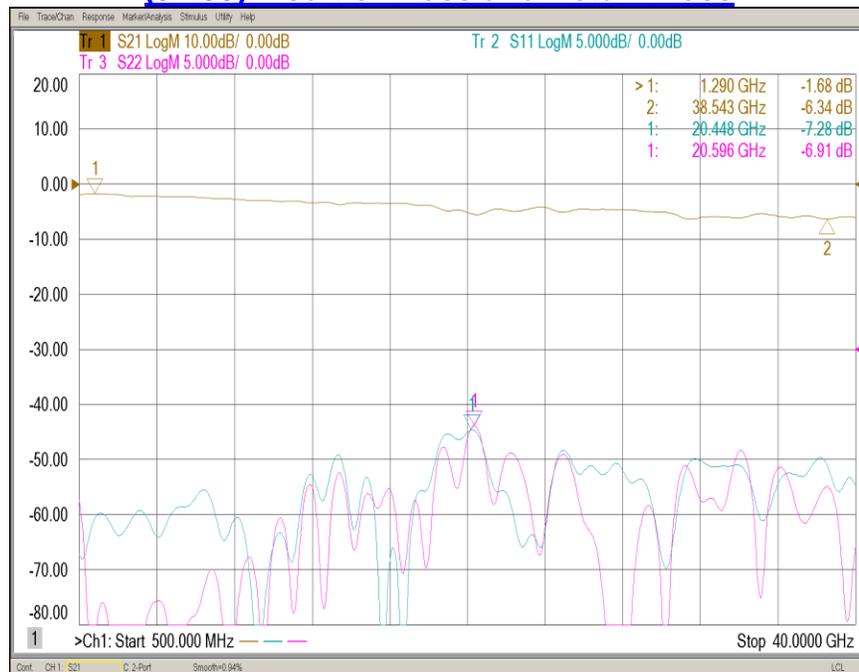
TYPICAL CHARACTERISTICS ON P8T-500M40G-50-R-55-292FF

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(J1-J8) Insertion Loss and Return Loss



(J1-J9) Insertion Loss and Return Loss



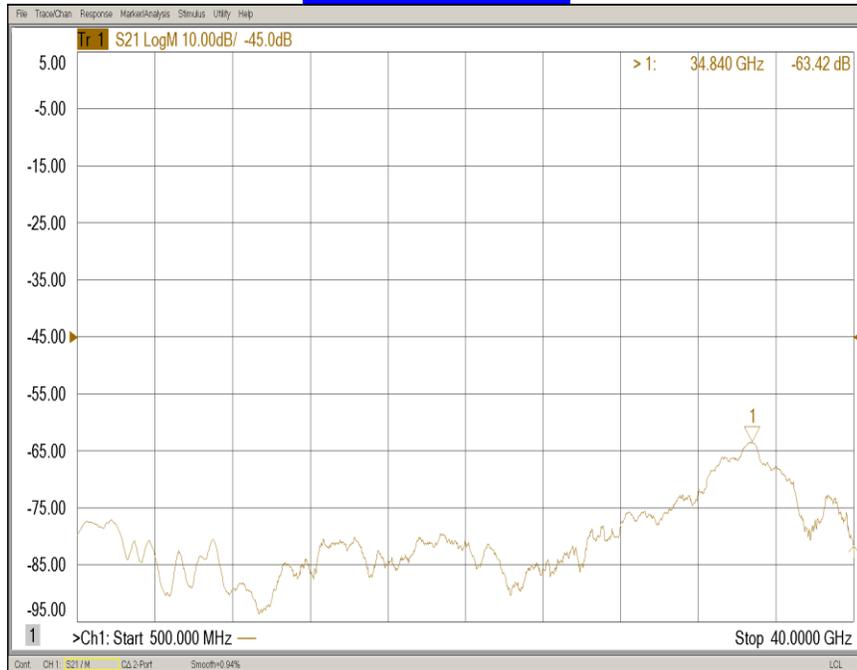
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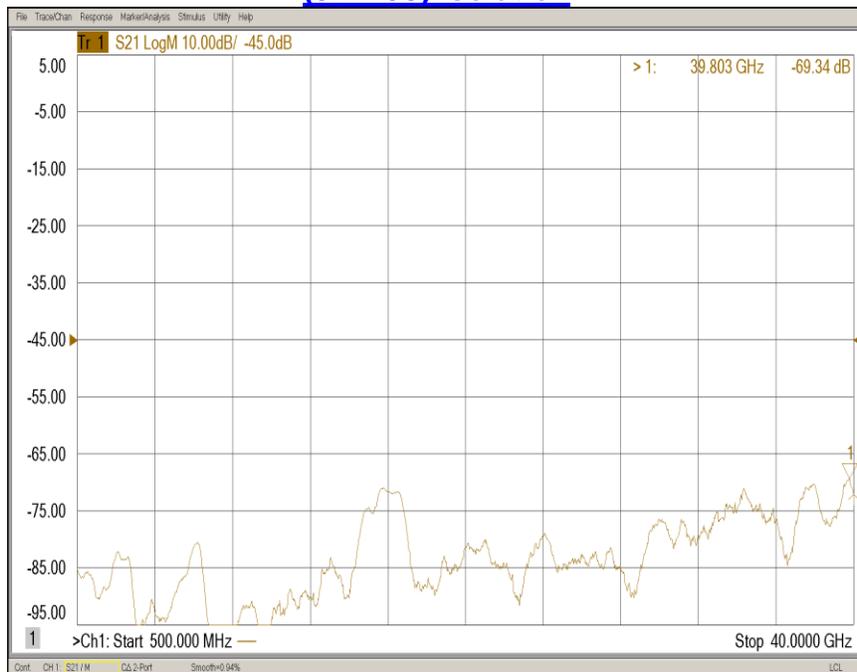
TYPICAL CHARACTERISTICS ON P8T-500M40G-50-R-55-292FF

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(J1 – J2) Isolation



(J1 – J3) Isolation



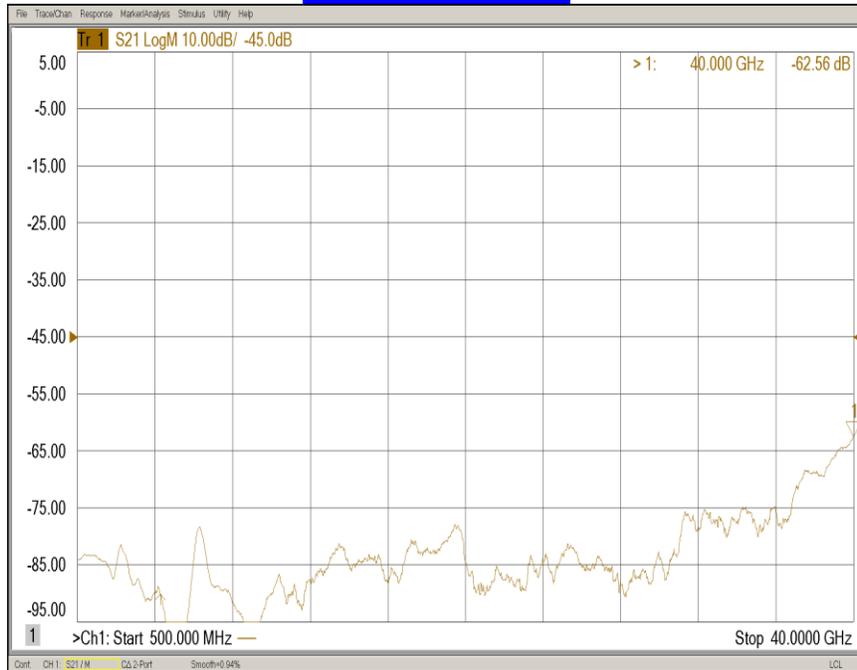
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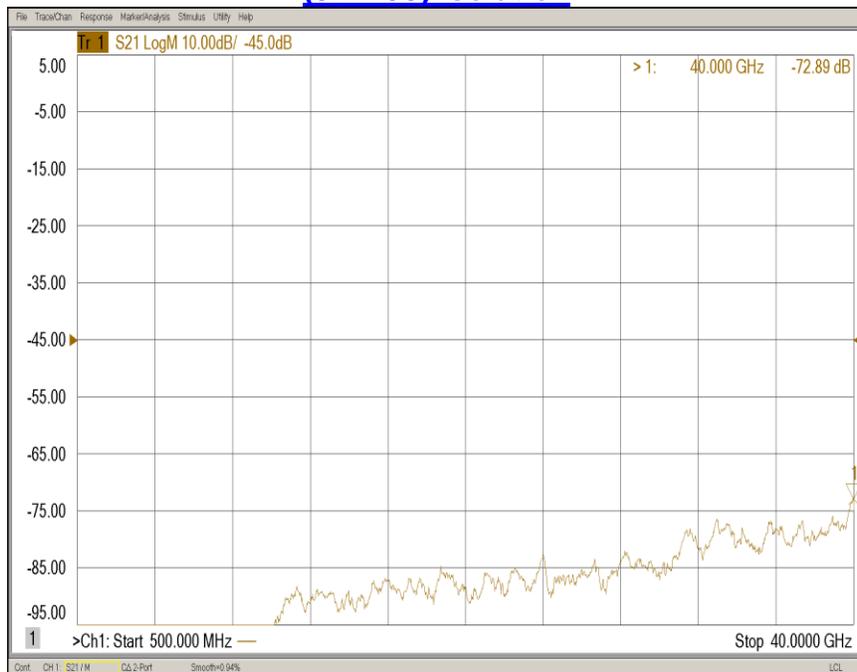
TYPICAL CHARACTERISTICS ON P8T-500M40G-50-R-55-292FF

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(J1 – J4) Isolation



(J1 – J5) Isolation



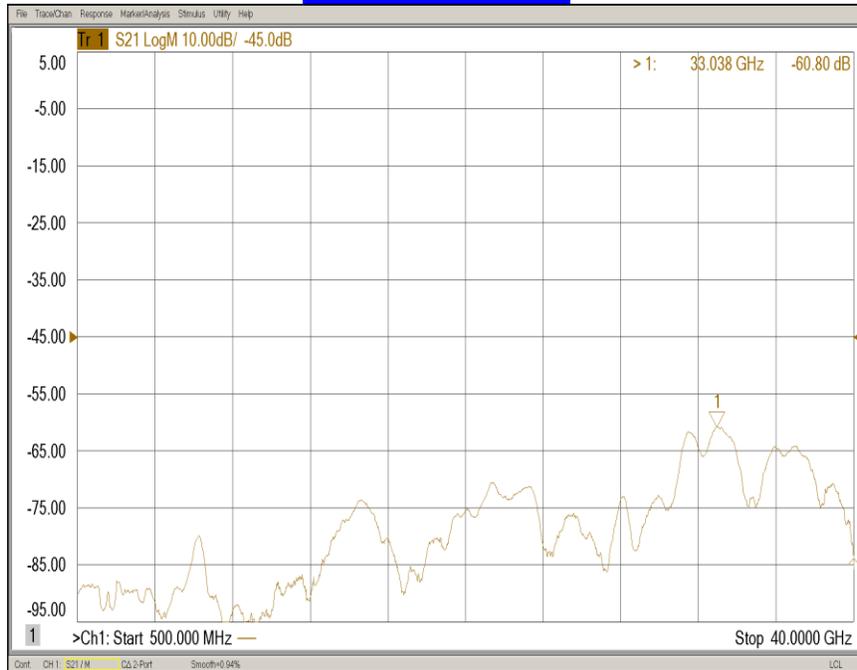
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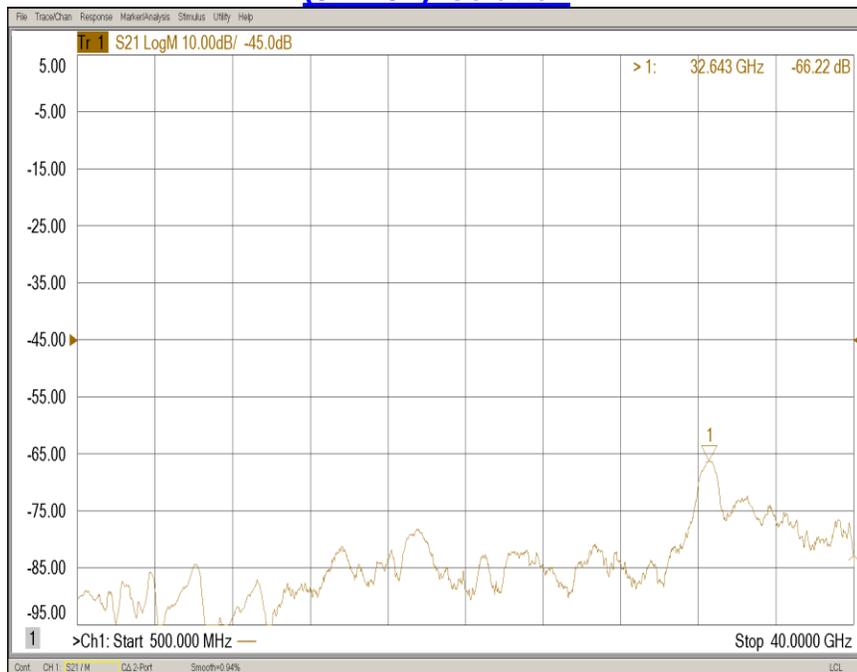
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(J1 – J6) Isolation



(J1 – J7) Isolation



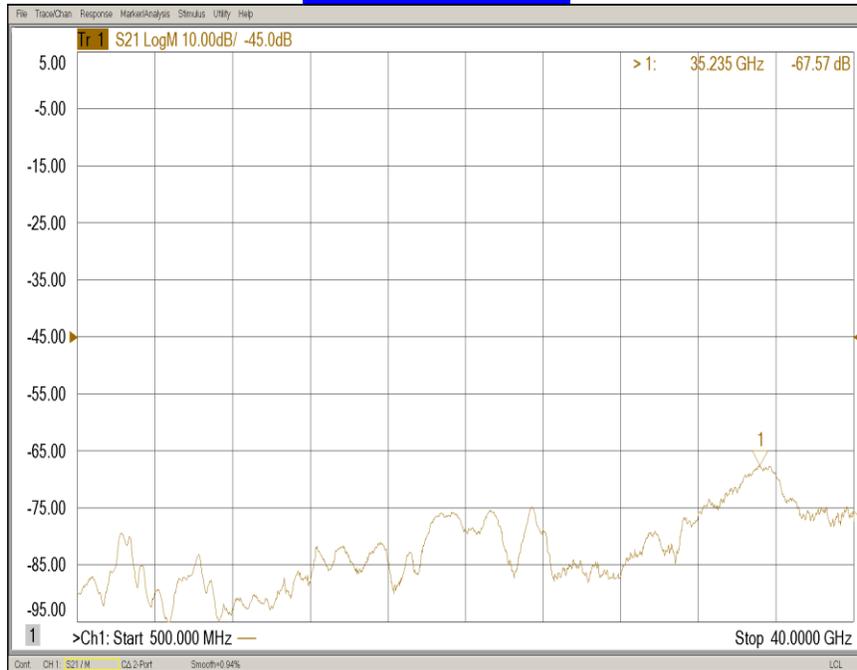
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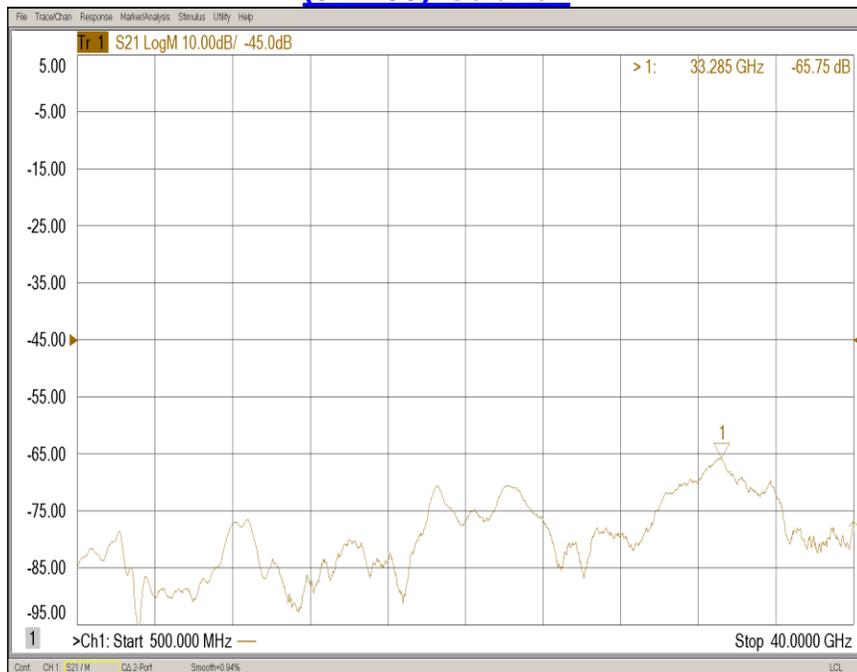
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(J1 – J8) Isolation



(J1 – J9) Isolation



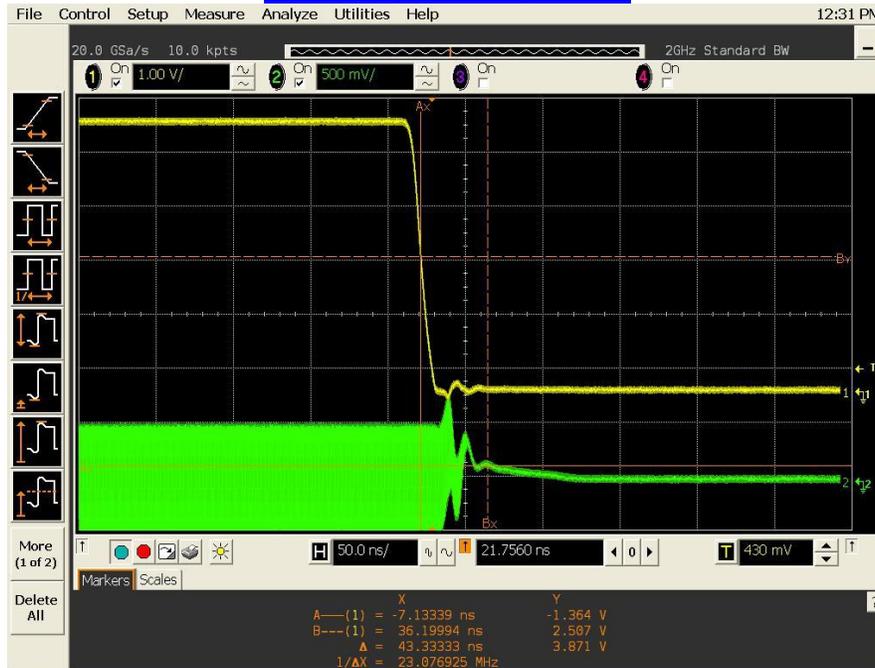
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TYPICAL CHARACTERISTICS ON P8T-500M40G-50-R-55-292FF

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Switching Speed TYP. OFF Delay – 50 ns per Div.



ON Delay and – 20 ns per Div.



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