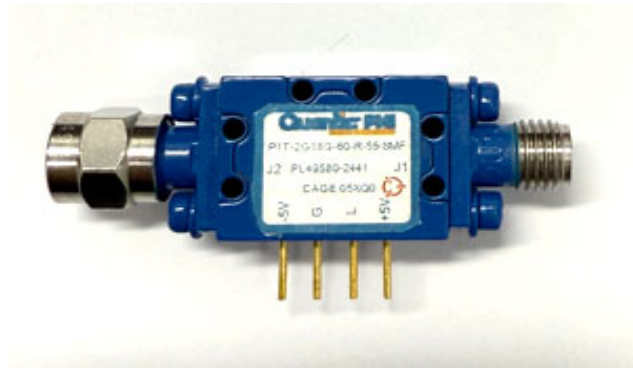


**TYPICAL CHARACTERISTICS
ON
P1T-2G18G-60-R-55-SMF**

PLANAR MONOLITHICS INDUSTRIES MODEL NUMBER P1T-2G18G-60-R-55-SMF IS A SINGLE POLE REFLECTIVE SWITCH OPERATING OVER THE FREQUENCY RANGE OF 2.0 TO 18.0 GHz. IT HAS A MINIMUM ISOLATION OF 60 dB AND A MAXIMUM INSERTION LOSS OF 2 dB. THIS MODEL IS OUTFITTED WITH ONE SMA MALE AND ONE SMA FEMALE CONNECTOR.



Reported By S Azhar
Tested By S Azhar
Date Oct 10th 2024

**TYPICAL CHARACTERISTICS
ON
P1T-2G18G-60-R-55-SMF**

PRODUCT FEATURE

DESCRIPTION:

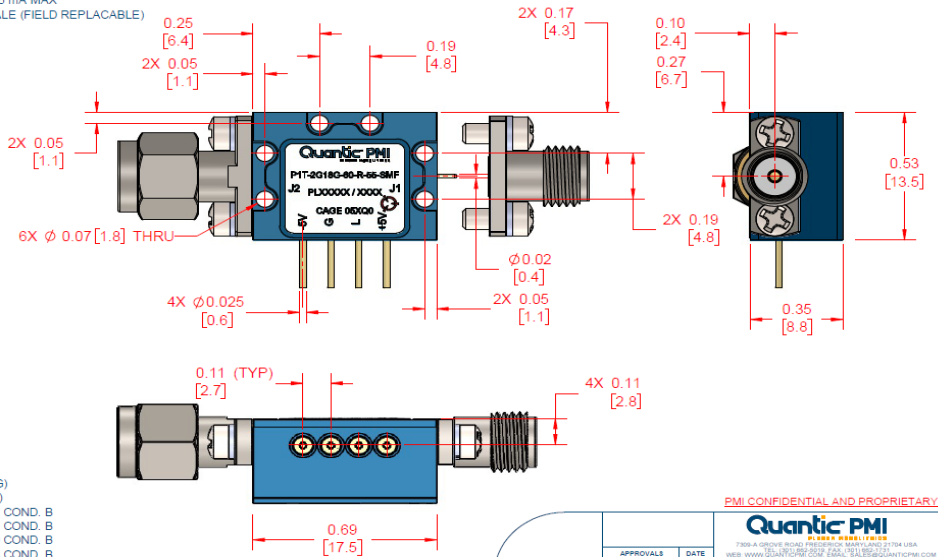
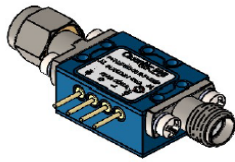
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| ZONE | REV. | DESCRIPTION | DATE | APPROVED |
|------|------|------------------|------------|----------|
| | A1 | ORIGINAL RELEASE | 10/10/2022 | |
| | | | | |

SPECIFICATIONS:

- FREQUENCY RANGE:..... 2.0 TO 18.0 GHz
- INSERTION LOSS:..... 2.0 dB MAX
- ISOLATION:..... 60 dB MIN
- VSWR:..... 2.0:1 MAX
- SWITCHING SPEED:..... 50 ns MAX
- SUPPLY VOLTAGES :..... +5V @ 65 mA MAX -5V @ 65 mA MAX
- CONNECTORS:..... SMA MALE AND SMA FEMALE (FIELD REPLACABLE)
- FINISH:..... PAINTED BLUE
- INTERFACE:..... TTL (SEE TRUTH TABLE)

| L | OUTPUT |
|-----|--------|
| "1" | I L |
| "0" | ISO |



ENVIRONMENTAL RATINGS:

- TEMPERATURE:..... -54°C TO +85°C (OPERATING)
-60°C TO +125°C (STORAGE)
- HUMIDITY:..... MIL-STD-202, METHOD 103B COND. B
- MECHANICAL SHOCK:..... MIL-STD-202, METHOD 213B COND. B
- VIBRATION:..... MIL-STD-202, METHOD 204D COND. B
- ALTITUDE:..... MIL-STD-202, METHOD 105C COND. B
- TEMPERATURE CYCLE:..... MIL-STD-202, METHOD 107G COND. B

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

PMI CONFIDENTIAL AND PROPRIETARY

Quantic PMI

7309-A GROVE ROAD, FREDERICK, MARYLAND 21704 USA
WWW.QUANTICPMI.COM

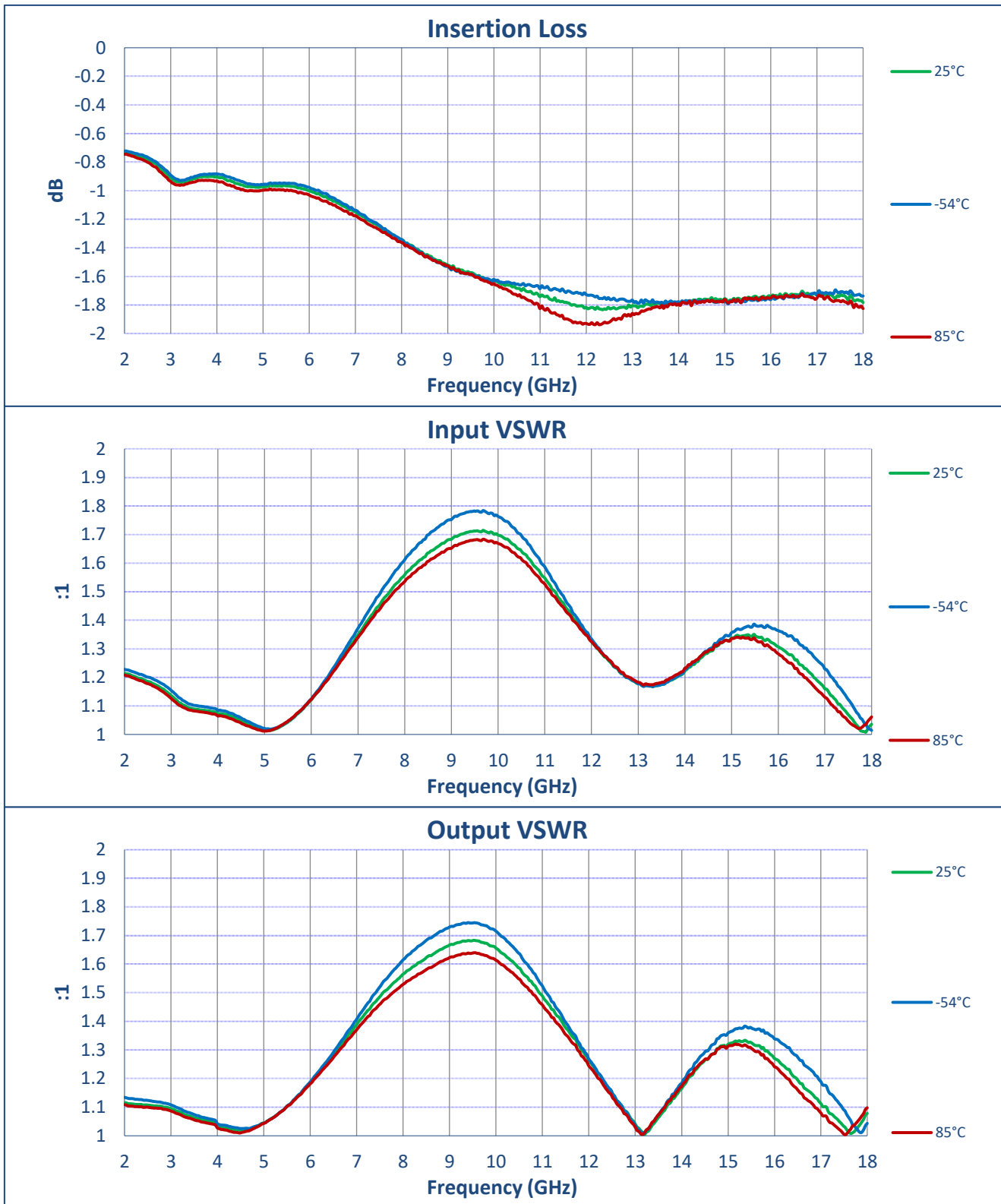
| APPROVALS | DATE | TITLE | OUTLINE |
|-------------------|------------|-----------------------|------------------|
| DESIGN S AZHAR | 10/10/2022 | P1T-2G18G-60-R-55-SMF | OUTLINE |
| ISSUED | | SIZE: 05X00 | DWG NO: 27047400 |
| | | SCALE: 2:1 | KEY: A1 |
| | | | SHEET 1 OF 1 |

**TYPICAL CHARACTERISTICS
ON
P1T-2G18G-60-R-55-SMF**

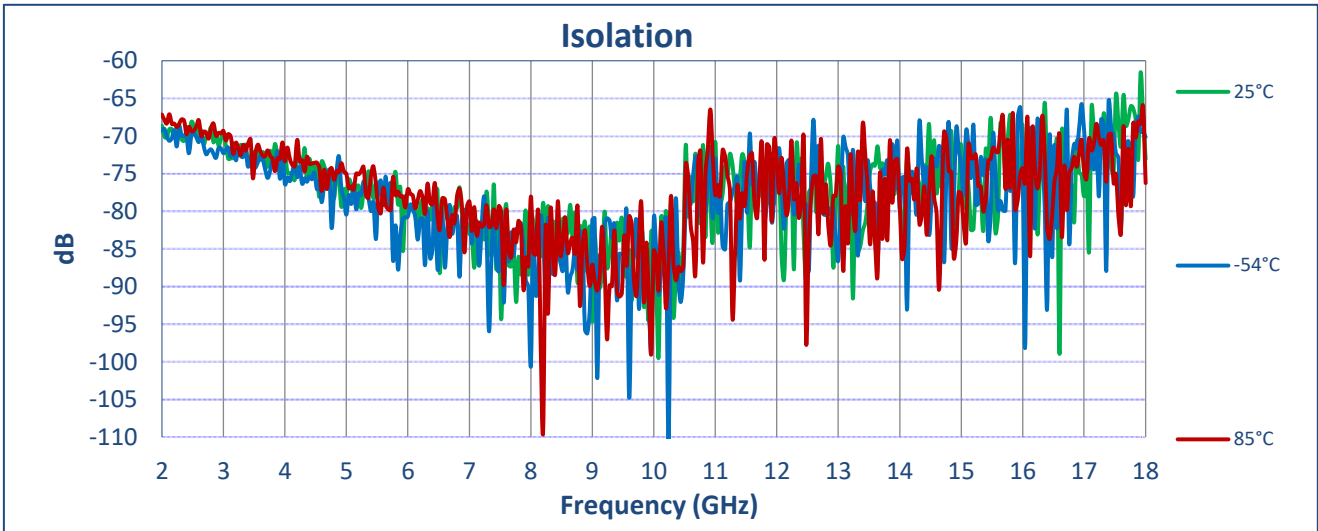
TEST DATA

| TEST ITEM | PARAMETERS | SPECIFIED VALUE | TEST RESULTS | | |
|-----------|---------------------|---------------------------------------|-----------------------------|-----------------------------|-----------------------------|
| | | | 25°C | -54°C | 85°C |
| 1 | Frequency Range | 2 GHz to 18 GHz | 2 GHz to 18 GHz | | |
| 2 | Insertion Loss | 2 dB Max. | 1.83 dB | 1.79 dB | 1.94 dB |
| 3 | Isolation | 60 dB Min. | 61.6 dB | 65.5 dB | 66.1 dB |
| 4 | VSWR: In/Out | 2:1 Max. | 1.71:1 In 1.68:1 Out | 1.78:1 In 1.75:1 Out | 1.68:1 In 1.64:1 Out |
| 5 | Switching Speed Max | 50 ns Max. | On: 16.3 ns Off: 22.5 ns | | |
| 6 | Power Supply | 5 V @ 65 mA Max. -5 V @ 65 mA Max. | 5 V @ 18 mA -5 V @ 22 mA | 5 V @ 17 mA -5 V @ 21 mA | 5 V @ 18 mA -5 V @ 22 mA |

**TYPICAL CHARACTERISTICS
ON
P1T-2G18G-60-R-55-SMF**



**TYPICAL CHARACTERISTICS
ON
P1T-2G18G-60-R-55-SMF**



Switching Speed Off



**RF - YELLOW
TTL - GREEN**

Off Time: 22.5 ns

**TYPICAL CHARACTERISTICS
ON
P1T-2G18G-60-R-55-SMF**

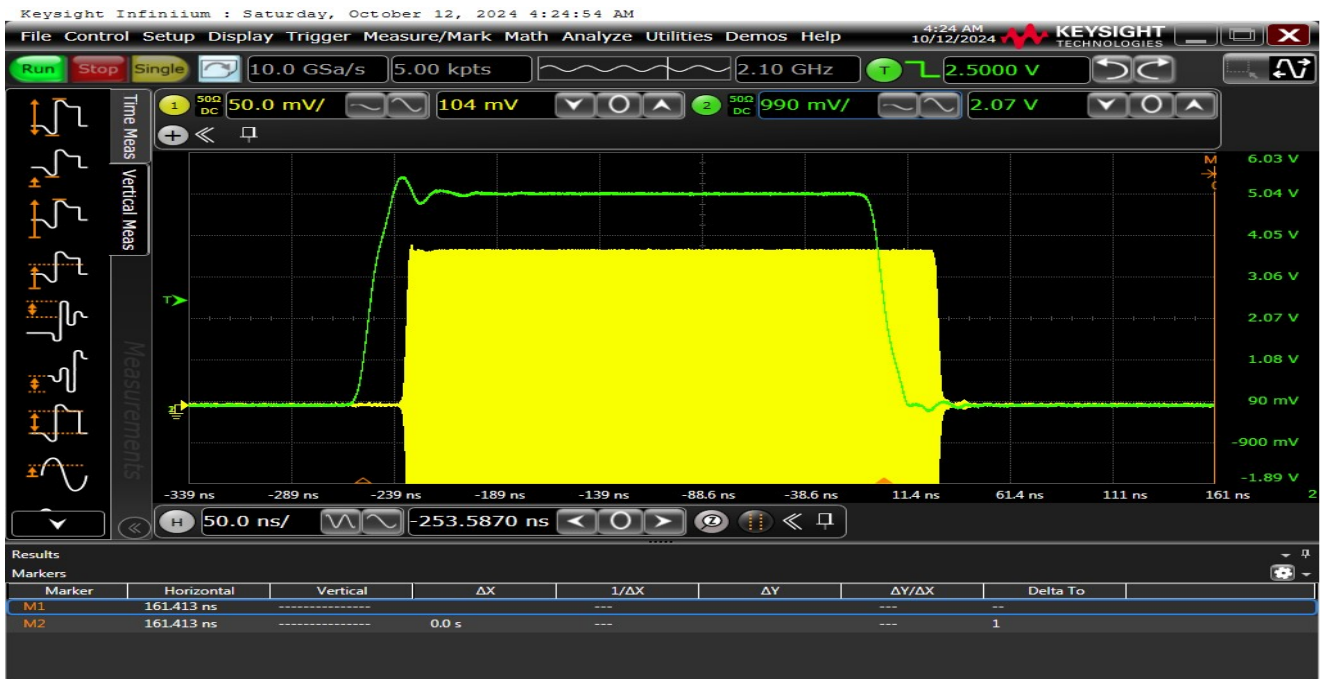
Switching Speed On



RF - YELLOW
TTL - GREEN

On Time: 16.250 ns

Full Pulse



RF - YELLOW
TTL - GREEN

7309-A Grove Road Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731
Email: sales@pmi-rf.com

**TYPICAL CHARACTERISTICS
ON
P1T-2G18G-60-R-55-SMF**

Transient On



TRANSIENT - YELLOW
TTL - GREEN

Transient : 1.84 V

Transient Off



TRANSIENT - YELLOW
TTL - GREEN

Transient : 1.00 V