

**DESCRIPTION:**

PLANAR MONOLITHICS INDUSTRIES MODEL NUMBER P2T-0D5G18G-55-T-512-SFF-LV-SP IS A TERMINATED SINGLE POLE, TWO THROW SWITCH THAT OPERATES FROM 2.0GHz TO 18.0GHz WHICH HANDLES +23dBm CW INPUT POWER. THE PORT TO PORT ISOLATION IS 55dB MINIMUM. THIS MODEL HAS LOW INSERTION LOSS WHILE STILL OFFERING A FAST SWITCHING SPEED OF 50nsec MAXIMUM.

**SPECIFICATIONS:**

- FREQUENCY: 0.5 GHz TO 18.0 GHz
- INSERTION LOSS: 4.0dB Maximum
- ISOLATION: 55dB Minimum
- VSWR: 2.0:1 Maximum
- INPUT POWER: +23dBm CW MAXIMUM (OPER.)
- SWITCHING SPEED: 50ns Maximum  
Ton = 50% TTL to 90% RF  
Toff = 50% TTL to 10% RF
- SWITCHING RATE PRF: 5MHz
- VIDEO LEAKAGE: 20mV Peak To Peak Maximum Measured At 350MHz BW
- CONTROL: (2 LINES) – TTL Logic "0" = Insertion Loss (1.6mA Max. Sink @ 0.4V)  
TTL Logic "1" = Isolation (40µA Max. Source @ 2.4V)  
**\*SURGE PROTECTION INCLUDED ON TTL LINES**
- DC VOLTAGE: 80mA @ +5VDC Typical  
80mA @ -12VDC Typical
- CONNECTORS: SMA FEMALE – Passive Stainless Steel
- POWER AND CONTROL - SOLDER PINS
- SIZE: 1.00 X 1.00 X 0.50 (H)
- WEIGHT: 1.5 OZ. TYPICAL
- SEALING: UNLESS OTHERWISE SPECIFIED, PMI WILL SUPPLY EPOXY SEAL
- 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.

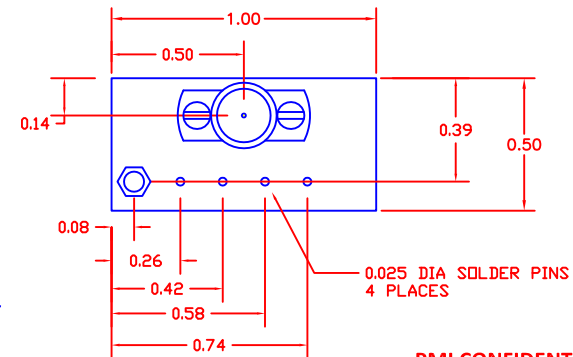
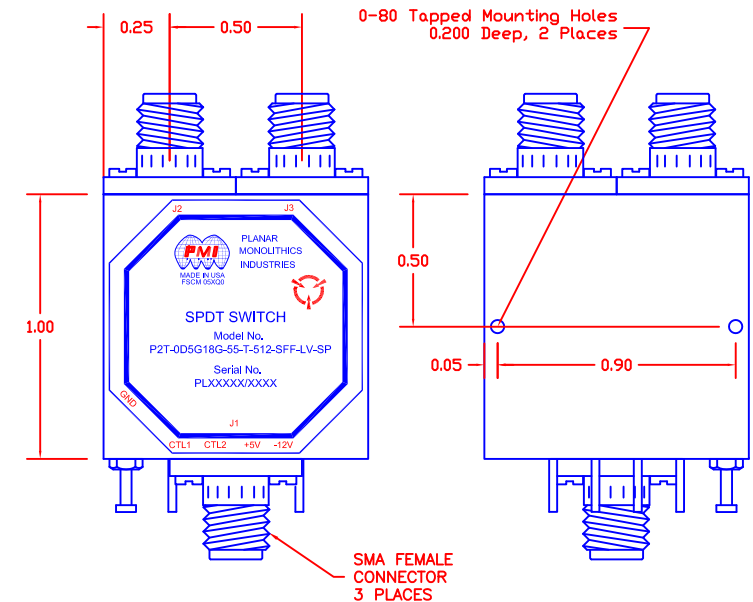
**ENVIRONMENTAL RATINGS**

- TEMPERATURE: -45°C TO +90°C (OPERATING)  
-54°C TO +125°C (STORAGE)
- HUMIDITY: MIL-STD-202F, METHOD 103B COND. B
- SHOCK: MIL-STD-202F, METHOD 213B COND. C
- VIBRATION: MIL-STD-202F, METHOD 204D COND. B
- SALT FOG: MIL-STD-202F, METHOD 101D-EST COND. B
- THERMAL SHOCK: MIL-STD-202F, METHOD 101D COND. A
- FUNGUS: MIL-STD-810F, METHOD 508.5
- EMI / EMC: MIL-STD-461E

LOGIC TABLE		
CTL1	CTL2	FUNCTION
0	0	*INSERTION LOSS (ALL ON)
0	1	J1 - J2
1	0	J1 - J3
1	1	ISOLATION (ALL OFF)

\*NOT TO SPECIFIED VALUES

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	PRELIMINARY	3/25/22	



PMI CONFIDENTIAL AND PROPRIETARY

**PLANAR MONOLITHICS INDUSTRIES, INC.**

7311-F GROVE ROAD  
 FREDERICK, MARYLAND 21704 USA  
 TEL: 301-662-5019 FAX: 301-662-1731  
 WEBSITE: [www.pmi-rf.com](http://www.pmi-rf.com)  
 E-MAIL: [sales@pmi-rf.com](mailto:sales@pmi-rf.com)  
 ISO 9001 CERTIFIED



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

Note: Environmental testing and ESS will be met, but actual testing is not done by PMI  
 Actual screening is available for an additional charge.  
 NOTE: CHANGES TO DRAWING OR SPECIFICATIONS MUST BE APPROVED BY THE END USER

APPROVALS		DATE	TITLE		
DRAWN <i>JPH</i>		9/25/22	PRODUCT FEATURE P2T-0D5G18G-55-T-512-SFF-LV-SP SP2T SWITCH		
REDRAWN			SIZE	FSCM NO.	DWG NO.
ISSUED			A	05XQ0	PRELIMINARY
			SCALE	N:S	SHEET 1 OF 1