

**DESCRIPTION:**

PLANAR MONOLITHICS INDUSTRIES MODEL NUMBER P2T-2G18G-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: 2.0 GHz TO 18.0 GHz
- INSERTION LOSS: 3.0dB Maximum
- ISOLATION: 55dB Minimum
- VSWR: 2.0:1 Maximum
- INPUT POWER: +23dBm CW MAXIMUM (OPER.)  
+27dBm CW MAXIMUM (SURV.)
- SWITCHING SPEED: 50nsec Maximum  
Ton = 50% TTL to 90% RF  
Toff = 50% TTL to 10% RF

Unconditionally Stable Under Any Input/Output VSWR Load

- SWITCHING RATE PRF: 5MHz
- VIDEO LEAKAGE: 50mV Peak To Peak Maximum Measured At 300MHz 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**

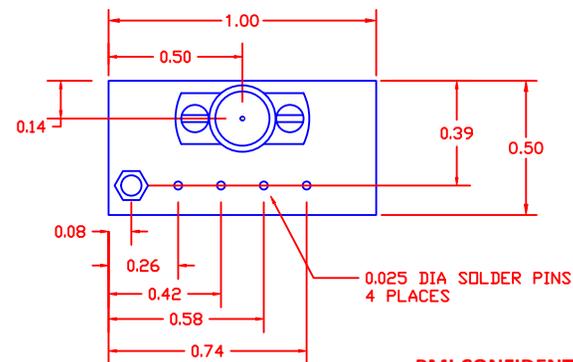
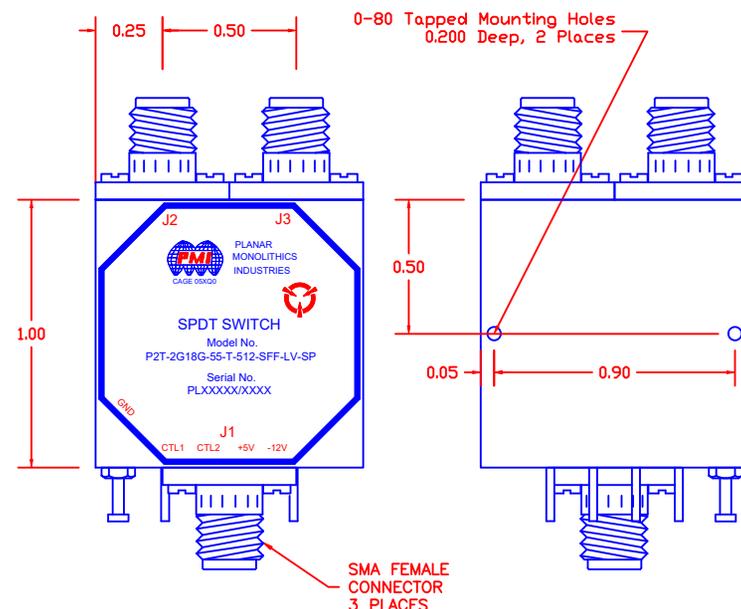
- TEMPERATURE: -45°C TO +90°C (OPERATING)  
-54°C TO +125°C (STORAGE)
- HUMIDITY: MIL-STD-202F, METHOD 103B COND. B
- SHOCK: MIL-STD-202F, METHOD 213B COND. C
- VIBRATION: MIL-STD-202F, METHOD 204D COND. B
- SALT FOG: MIL-STD-202F, METHOD 101D-EST COND. B
- THERMAL SHOCK: MIL-STD-202F, METHOD 101D COND.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

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**

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
	A1	ORIGINAL RELEASE	11/1/18	
	A2	ECN # 20-0037	02/10/20	
	A3	ECN # 20-0125	7/6/20	



**PMI CONFIDENTIAL AND PROPRIETARY**

**PLANAR MONOLITHICS INDUSTRIES, INC.**

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ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE		
DRAWN	ANG	09/22/13	PRODUCT FEATURE P2T-2G18G-55-T-512-SFF-LV-SP SP2T SWITCH		
REDRAWN	SMH	10/27/17	SIZE	FSCM NO.	DWG NO.
ISSUED			A	05XQ0	27033621
			SCALE	N:S	SHEET 1 OF 1
			REV.	A3	

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