

DESCRIPTION:

PMI MODEL P1T-DC18-60-T-SFF-HSLVT-LSC IS A SINGLE POLE, SINGLE THROW, ABSORPTIVE SWITCH WHICH OFFERS ULTRA-LOW VIDEO TRANSIENT PERFORMANCE WHILE PROVIDING ULTRA-FAST SWITCHING SPEED AND HIGH ISOLATION. THIS SWITCH MODULE CONTAINS AN INTEGRAL TTL DRIVER AND THE DC SUPPLY VOLTAGE IS ONLY -5V.

SPECIFICATIONS:

- FREQUENCY RANGE:..... DC TO 18 GHz
- INSERTION LOSS:..... 4.5 dB MAX
- ISOLATION
 - 10 MHz TO 2 GHz:..... 55 dB MIN
 - 2 GHz TO 12 GHz:..... 60 dB MIN
 - 12 MHz TO 18 GHz:..... 70 dB MIN
- VSWR (IN/OUT):..... 2.0:1 MAX
- RISE TIME:..... 10 ns MAX
- FALL TIME:..... 10 ns MAX
- SPEED ON:..... 30 ns MAX
- SPEED OFF:..... 25 ns MAX
- VIDEO TRANSIENT
 - 300 MHz BW (2-18 GHz):..... 40 mV P-P MAX
 - 20 MHz BW (2-18 GHz):..... 25 mV P-P MAX
- POWER INPUT:..... (CW) +20 dBm
- SPEED MATCHING UNIT TO UNIT (PER LOT):..... ±2 ns MAX
- LEAKAGE TEST (UNIT TO UNIT)*:..... 60 dB MIN (10 MHz TO 1 GHz)
90 dB MIN (1 TO 18 GHz)
- LEAKAGE TTL PORT:..... 60 dB MIN (10 MHz TO 12 GHz)
70 dB MIN (12 TO 18 GHz)
- SPECTRAL EMISSIONS DURING SWITCHING (SPECTRUM CONTENT):..... 50 dBm MIN (10 MHz TO 0.5 GHz)
80 dBm MIN (0.5 TO 18 GHz)
1.0 kHz VBW/RBW
- CONTROL:..... TTL LOGIC "0" = ON
TTL LOGIC "1" = OFF
- POWER SUPPLY:..... -5V @ 25 mA MAX
- CONNECTORS
 - RF:..... SMA FEMALE
 - CONTROL:..... SOLDER PIN
- SIZE:..... (L) 1.0" X (W) 1.0" X (H) 0.5"
- WEIGHT:..... 1.5 OUNCE TYP
- FINISH:..... GOLD PLATED

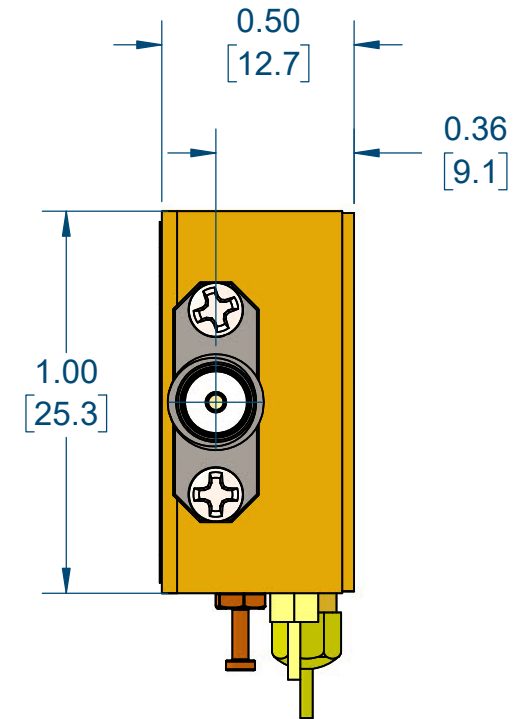
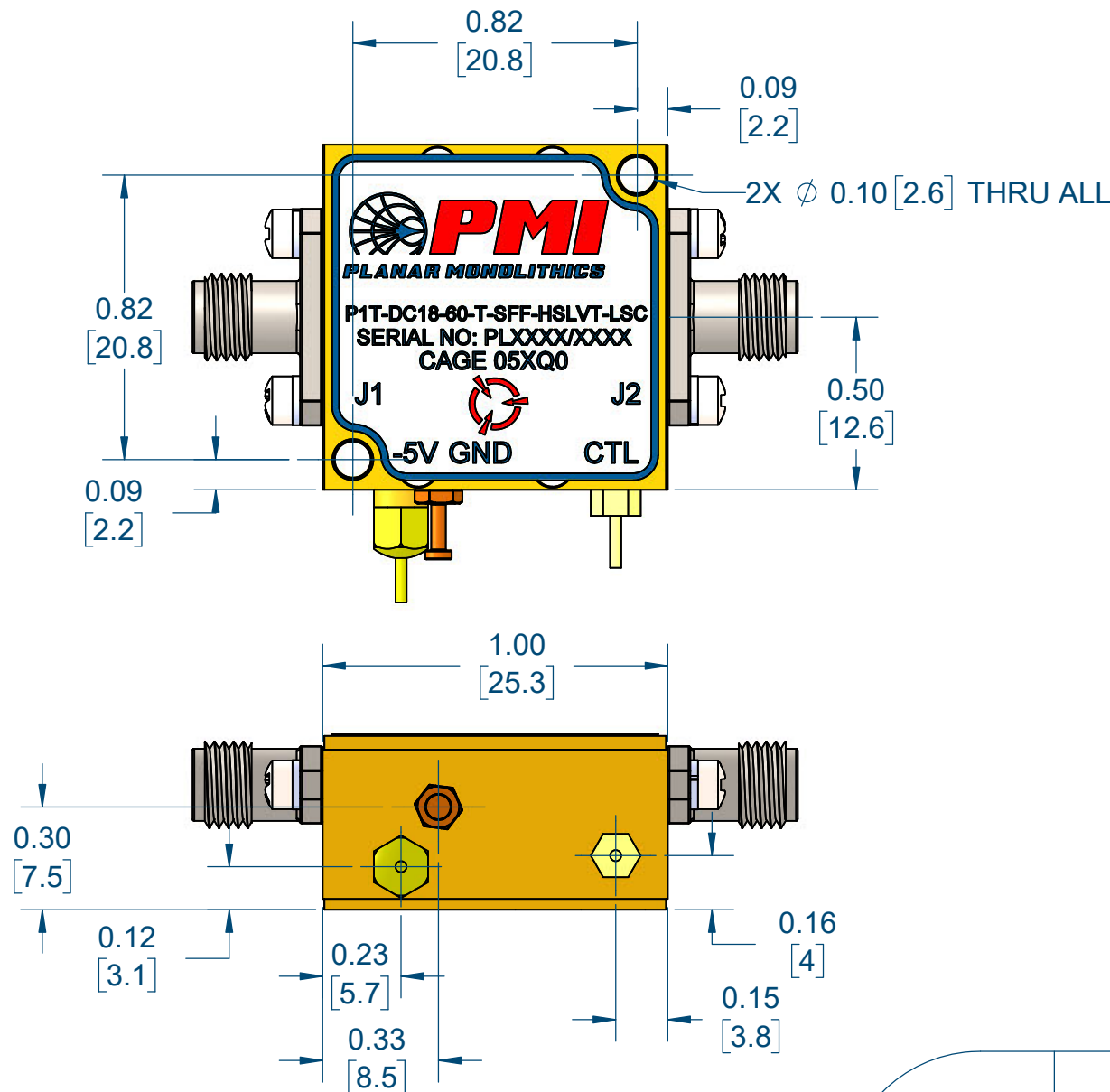
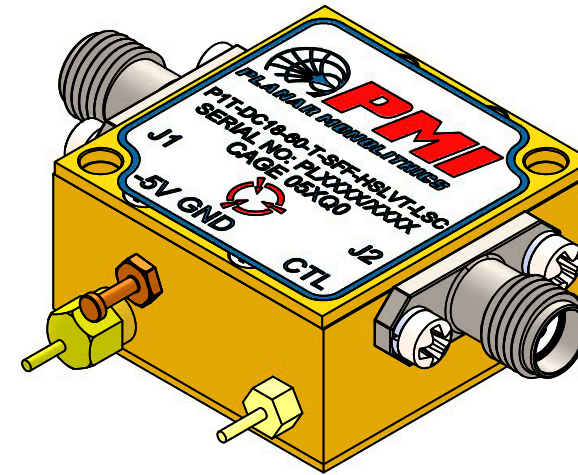
NOTE: * MORE THAN ONE UNIT

ENVIRONMENTAL RATINGS:


- TEMPERATURE:..... -55°C TO +85°C (OPERATING)
-55°C TO +125°C (STORAGE)
- HUMIDITY:..... MIL-STD-202, METHOD 103B COND. B
- 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 107 COND. A

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

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	2/4/2026	



PMI CONFIDENTIAL AND PROPRIETARY

APPROVALS		DATE	 7309-A GROVE ROAD FREDERICK, MARYLAND 21704 USA TEL: (301) 662-5019, FAX: (301) 662-1731 WEB: WWW.QUANTICPMI.COM, EMAIL: SALES@QUANTICPMI.COM ISO 9001 CERTIFIED	
DRAWN		2/4/2026		
G.MENDEZ				
REDRAWN				
ISSUED			TITLE	OUTLINE
			P1T-DC18-60-T-SFF-HSLVT-LSC	
SIZE	FSCM NO.	DWG NO.	REV.	
B	05XQ0	27054501	A1	
SCALE 2:1			SHEET 1 OF 1	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS DECIMALS ANGLES
± .XX ± 0.02 ±
XXX ± 0.01