

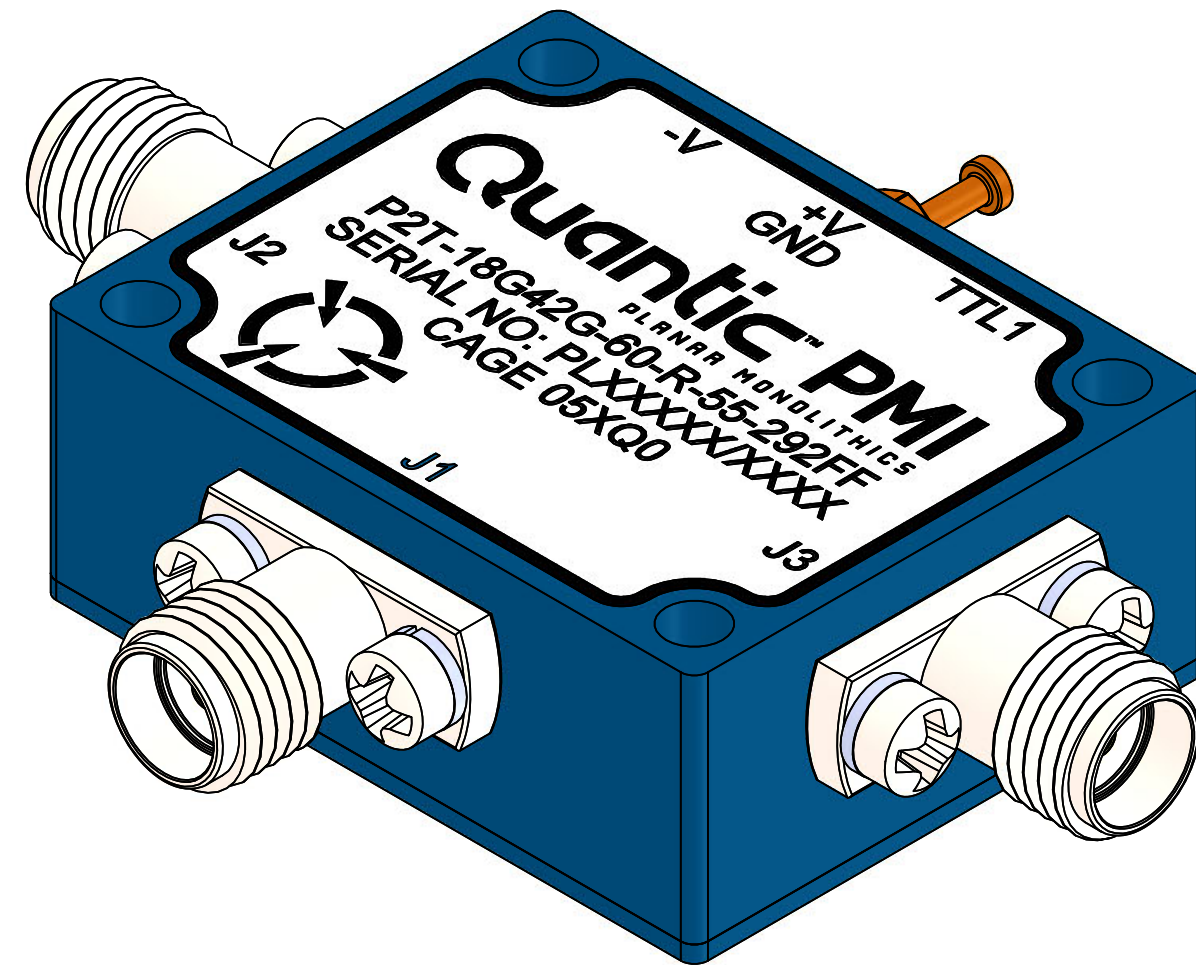
DESCRIPTION:

PMI MODEL P2T-18G42G-60-R-55-292FF IS A REFLECTIVE SINGLE POLE, TWO THROW PIN DIODE SWITCH THAT OPERATES OVER THE 18 GHz TO 42 GHz FREQUENCY RANGE.

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	8/20/2025	
	B1	ECN # 25-0295	11/7/2025	

SPECIFICATIONS:

- FREQUENCY RANGE:..... 18-42 GHz
- IMPEDANCE:..... 50 Ω
- VSWR (IN/OUT):..... 2.5:1 MAX
- INSERTION LOSS:..... 4.5 dB GOAL, 5.5 dB MAX
- ISOLATION:..... 60 dB MIN
- INPUT POWER HANDLING (SURVIVAL):..... +27 dBm CW MAX,
- INPUT POWER HANDLING (NON-DEGRADING):..... +25 dBm CW OR PEAK MAX
- HARMONIC GENERATION
(+15 dBm INPUT AT DEVICE CENTER
FREQUENCY)..... -30 dBc MAX
- SPURIOUS SIGNALS / AM SIDEBANDS:..... -65 dBc MAX
- SWITCHING SPEED:
(AT +10 dBm INPUT POWER. MEASUREMENT TAKEN
WITH CRYSTAL DETECTOR TERMINATED WITH 50
OHMS)
DRIVER DELAY AND SWITCH TIME (ON)
(50% TTL TO INSERTION LOSS)..... 200 nsec MAX
DRIVER DELAY AND SWITCH TIME (OFF)
(50% TTL TO INSERTION LOSS)..... 200 nsec MAX
- VIDEO TRANSIENTS :..... 20 mVpp MAX
(MEASURED INTO A 20 MHz BW AT 50 OHMS, ALL RF PORTS)
- VIDEO LEAKAGE :..... -60 dBm MAX
(MEASURED WITH 500 KHz TTL SQUARE WAVE AND
SPECTRUM ANALYZER AT RBW = 3.0 MHz, VBW = 3.0 MHz,
RF ATTENUATION = 0 dB
- POWER SUPPLY :..... +5 VDC ±5% @ 175 mA MAX
-5 VDC +5% TO -12 VDC -5% @ 75 mA MAX
- CONTROL:..... TTL LOGIC
0: J2 ENABLED
1: J3 ENABLED
- CONNECTORS:..... 2.92 mm FEMALE
- FINISH:..... PAINTED BLUE



ENVIRONMENTAL RATINGS:

- TEMPERATURE:..... 0°C TO +60°C (OPERATING)
-55°C TO +75°C (STORAGE)
- HUMIDITY:..... NON-CONDENSING HUMIDITY LEVELS:
BETWEEN 0.0% AND 80.0% RH, INCLUSIVE (OPERATING)
BETWEEN 0.0% AND 90.0% RH, INCLUSIVE (STORAGE)
- VIBRATION AND SHOCK:..... CAN OPERATE WITHIN SPECIFICATIONS AFTER
SHIPMENT VIA COMMERCIAL TRANSPORTATION
- ALTITUDE:..... MIL-STD-810
FROM SEA-LEVEL TO 10,000 FT (OPERATING)
FROM SEA-LEVEL TO 40,000 FT (STORAGE)

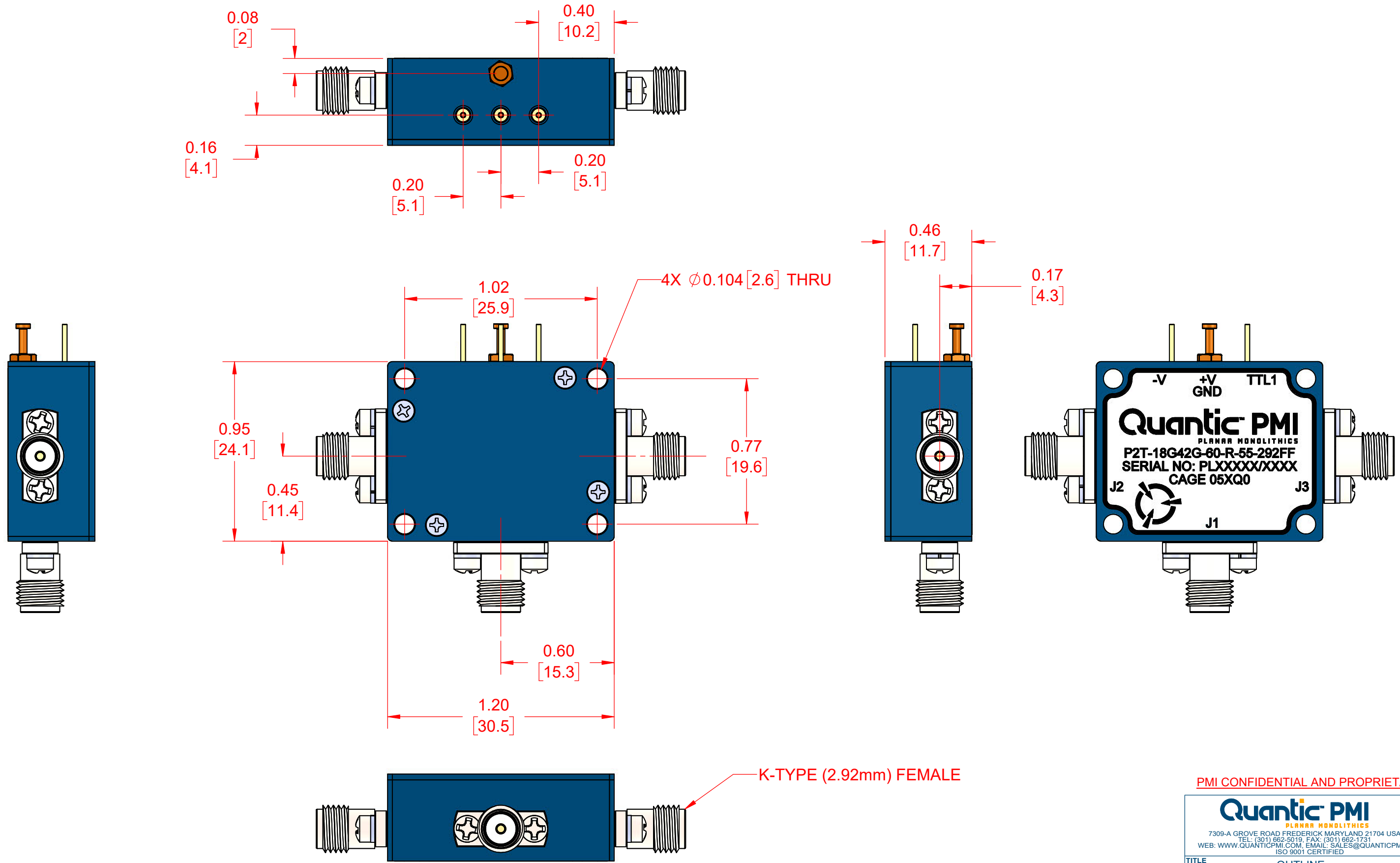
NOTE: SPECIFICATIONS WILL VARY OVER TEMPERATURE
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

PMI CONFIDENTIAL AND PROPRIETARY

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± .XX ± 0.02 ± .XXX ± 0.01		APPROVALS DATE DRAWN 8/20/2025 V. PRATAP REDRAWN ISSUED		TITLE OUTLINE P2T-18G42G-60-R-55-292FF	
		SIZE B	FSCM NO. 05XQ0	DWG NO. 27052480	REV. B1
SCALE 2:1			SHEET 1 OF 2		

Quantic PMI
PLANAR MONOLITHICS

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



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

PMI CONFIDENTIAL AND PROPRIETARY

Quantic PMI PLANAR MONOLITHICS			
<small>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</small>			
TITLE		OUTLINE	
		P2T-18G42G-60-R-55-292FF	
SIZE	FSCM NO.	DWG NO.	REV.
B	05XQ0	27052480	B1
SCALE 2:1		SHEET 2 OF 2	