

DESCRIPTION

PMI MODEL P1T-DC40G-65-T-292FF-1NS-HERM IS AN ABSORPTIVE, SINGLE POLE, SINGLE THROW PIN DIODE SWITCH THAT OPERATES FROM DC TO 40 GHZ. THIS MODEL INCORPORATES A TTL COMPATIBLE DRIVER FOR EASY SYSTEM INTEGRATION.

SPECIFICATIONS

- FREQUENCY RANGE: DC to 40GHz
- ISOLATION: 65dB Typical, 55dB Min.
- INSERTION LOSS: 5.5dB Typical, 6.8dB Max.
- VSWR IN / OUT: 2.0:1 Typical, 2.2:1 Max.
- INPUT POWER: +17 dBm CW MAX
- SWITCHING SPEED: 5ns Typical, 6ns Max.
- RISE/FALL TIME: 0.9ns Typical, 1ns Max.
- CONTROL SIGNAL: TTL "1" = ON
- DC VOLTAGE: +8 to +15V @ 15mA Max.
-8 to -15V @ 40mA Max.
- CONNECTORS IN/OUT: 2.92mm FEMALE CONNECTORS
- FINISH: GRAY EPOXY POLIMIDE COATING
IAW MIL-C-22750, TYPE I OVER
EPOXY POLIMIDE PRIMER
IAW MIL-P-23377, TYPE I,
CLASS 1 OR 3.
HERMETICALLY SEALED
- SIZE: 1.2" X 1.3" X 0.50"

ENVIRONMENTAL RATINGS

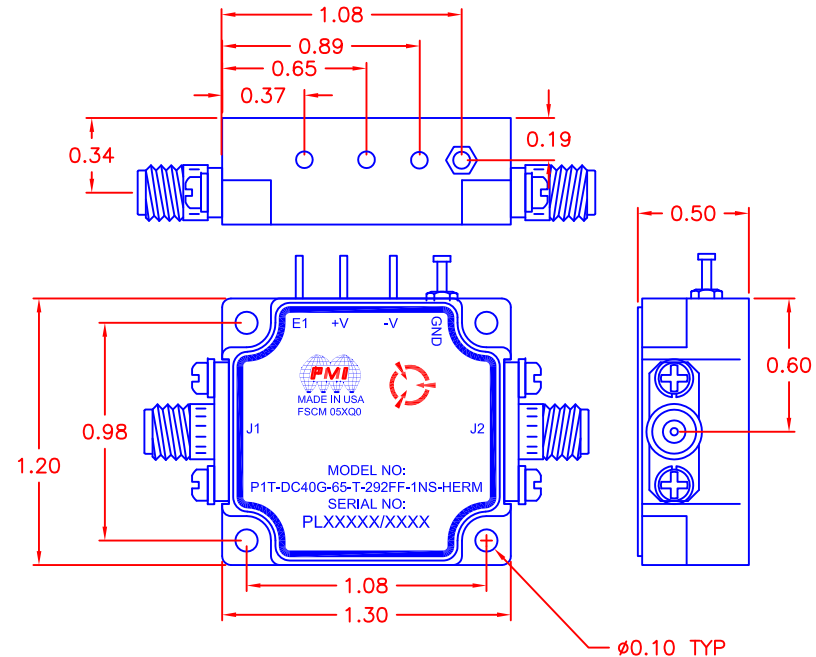
- TEMPERATURE:** -50°C TO +50°C (OPERATING)
-60°C TO +60°C (STORAGE)
- LOW PRESSURE:** THE DEVICE WORKS NORMALLY WITHIN THE ALTITUDE RANGE OF 0 TO 4500 M
- HOT AND HUMID REQUIREMENTS:** THE TEMPERATURE IN THE EXPERIMENTAL CHAMBER WAS 30 DEGREE CELSIUS AND THE RELATIVE HUMIDITY WAS 95%. THE PERFORMANCE OF THE DEVICE WAS RESTORED TO STANDARD ATMOSPHERIC CONDITIONS, AND THE DATA WAS MEASURED AND COMPARED AT ROOM TEMPERATURE
- VIBRATION AND IMPACT REQUIREMENTS:** AFTER BEING TRANSPORTED BY ROAD, RAILWAY, WATER AND AIR, THE EQUIPMENT CAN WORK NORMALLY
- SALT SPRAY TEST:** THE CONCENTRATION OF SALT SOLUTION SHALL BE 5%-1%, AND THE EXPERIMENTAL TEMPERATURE SHALL BE 35°C+/-2%. TWO STATES OF SALT SPRAY SPRAYING AND DRYING FOR 24 HOURS SHALL BE USED ALTERNATELY. THEN, THE SPECIMEN SHALL BE GENTLY WASHED WITH RUNNING WATER UNDER STANDARD ATMOSPHERIC CONDITIONS, AND THE EXPERIMENTAL RESULTS SHALL BE RECORDED AND COMPARED WITH THE DATA BEFORE DEVICE TEST
- MOLD TEST:** THE EQUIPMENT SHOULD WORK WELL IN TROPICAL CLIMATES IN THE PRESENCE OF MOLD GROWTH

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

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

REVISIONS			
ZONE	REV.	DESCRIPTION	DATE
	—	PRELIMINARY	8/26/22

MECHANICAL OUTLINE



PMI CONFIDENTIAL AND PROPRIETARY

PLANAR MONOLITHICS INDUSTRIES, INC.

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APPROVALS		DATE	TITLE			
DRAWN		8/26/22	PRODUCT FEATURE			
CHECKED			P1T-DC40G-65-T-292FF-1NS-HERM			
ISSUED			SIZE	FSCM NO.	DWG NO.	REV.
			A	05XQ0	PRELIMINARY	—
			SCALE	N:S	SHEET	1 OF 1