

DESCRIPTION

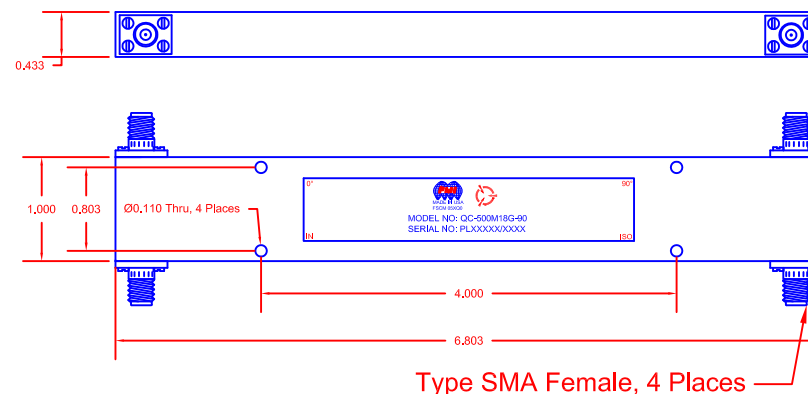
PMI MODEL NO. QC-500M18G-90 IS A QUADRATURE COUPLER THAT OPERATES OVER THE FREQUENCY RANGE OF 500 MHz TO 18.0 GHz. IT HAS A MINIMUM ISOLATION OF 14 dB AND A MAXIMUM INSERTION LOSS OF 3.5 dB. THIS PRODUCT IS OUTFITTED WITH SMA FEMALE CONNECTORS.

| REVISIONS | | | | |
|-----------|------|-------------|-----------|----------|
| ZONE | REV. | DESCRIPTION | DATE | APPROVED |
| | - | PRELIMINARY | 5/18/2021 | |
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MECHANICAL OUTLINE

SPECIFICATIONS

- FREQUENCY RANGE: ----- 500 MHz TO 18.0 GHz
- NOMINAL SPLIT: ----- 3.01 dB
- INSERTION LOSS: ----- ≤ 3.5 dB
- ISOLATION: ----- ≥ 14 dB
- AMPLITUDE BALANCE: ----- $\leq \pm 1.2$ dB
- PHASE BALANCE: ----- $\leq \pm 12^\circ$
- VSWR: ----- $\leq 1.80:1$
- POWER HANDLING: ----- Average ≤ 20 Watt
Peak ≤ 0.5 KW
- IMPEDANCE: ----- 50 OHMS
- CONNECTORS: ----- SMA FEMALE



ENVIRONMENTAL RATINGS

- TEMPERATURE: ----- -55 °C TO +85 °C (OPERATING)
-65 °C TO +125 °C (STORAGE)
- HUMIDITY: ----- UP TO 95%, NON-CONDENSING
- 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 107D COND. A

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

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

PMI CONFIDENTIAL AND PROPRIETARY

PLANAR MONOLITHICS INDUSTRIES, INC.

7311-F GROVE ROAD

FREDERICK, MARYLAND 21704 USA

TEL: (301)-662-5019, FAX: (301)-662-1731

WEB: www.pmi-rf.com, EMAIL: sales@pmi-rf.com

ISO 9001 CERTIFIED



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|--------------------|-----------|---|-------------------|----------------------------|-----------|--|--|
| | | TITLE PRODUCT FEATURE QC-500M18G-90 | | | | | |
| APPROVALS | DATE | | | | | | |
| DRAWN <i>AF</i> | 5/18/2021 | | | | | | |
| REDRAWN | | SIZE A | FSCM NO. 05XQ0 | DWG NO. PRELIMINARY | REV. - | | |
| ISSUED | | SCALE N:S | | SHEET 1 OF 1 | | | |