

**ELECTRICAL SPECIFICATIONS:**

- 1.) FREQUENCY RANGE: 1.000 - 2.000 GHz
- 2.) IMPEDANCE: 50 OHMS
- 3.) INSERTION LOSS (MAX): 1.5 dB (ABOVE 10.79 dB SPLIT)
- 4.) AMPLITUDE BALANCE (MAX): 0.5 dB
- 5.) PHASE BALANCE (MAX): 8 DEGREES
- 6.) ISOLATION (MIN): 18 dB
- 7.) INPUT VSWR (MAX): 1.45 : 1
- 8.) OUTPUT VSWR (MAX): 1.25 : 1
- 9.) DC VOLTAGE/CURRENT (MAX): 10 VOLTS/50 mA

**MECHANICAL SPECIFICATIONS:**

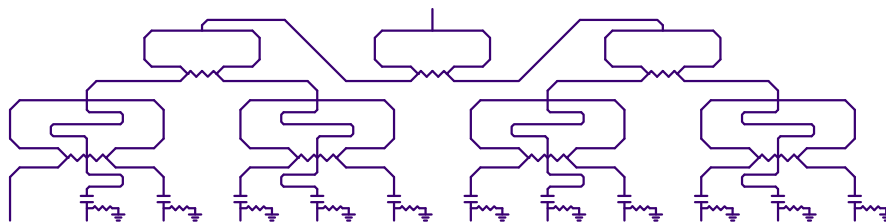
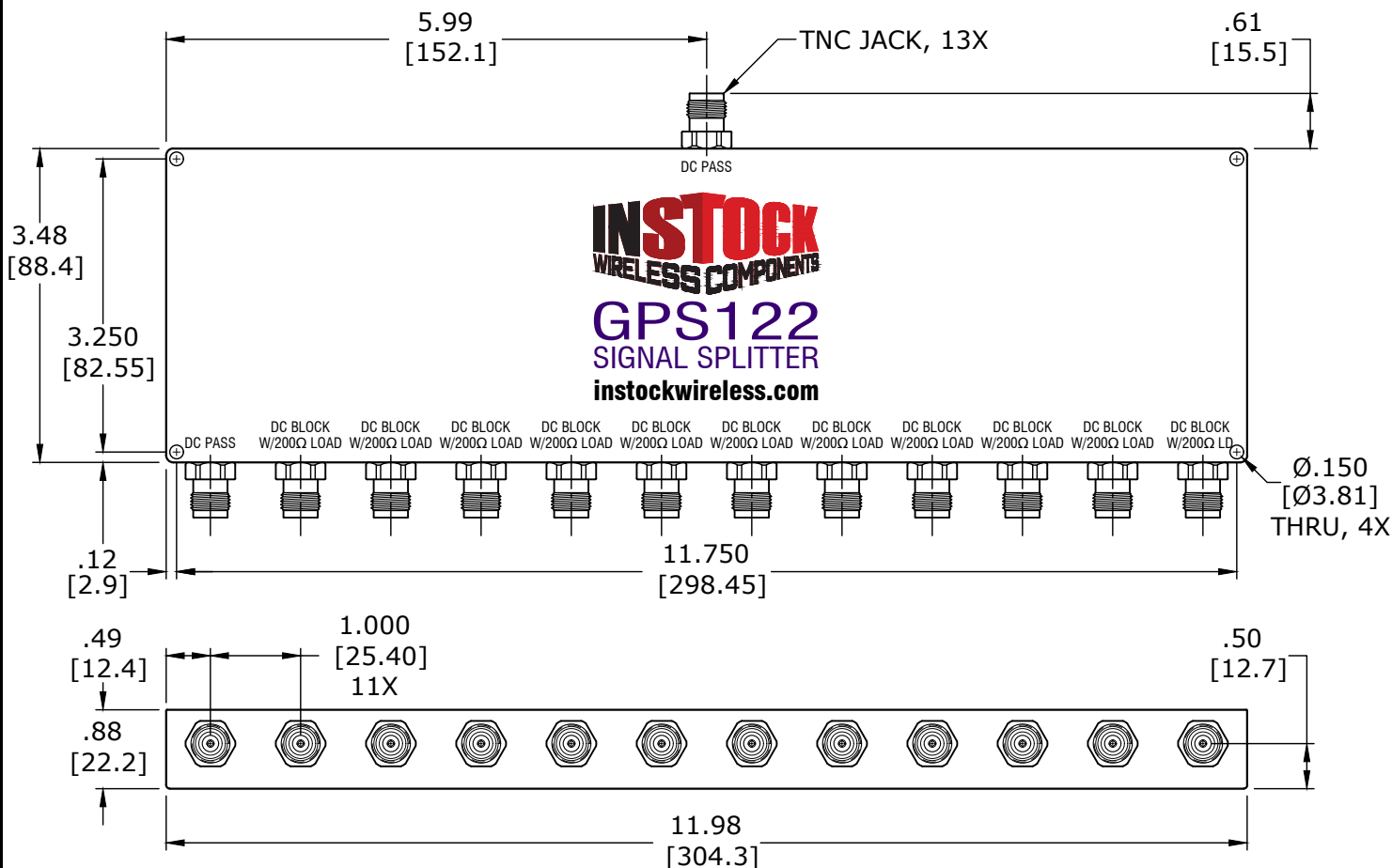
- 1.) CONNECTORS: TNC FEMALE (JACK), 50 OHM
- 2.) CONNECTOR BODY: BRASS, TRI-ALLOY PLATE
- 3.) CONNECTOR PIN: BERYLLIUM COPPER, GOLD PLATE
- 4.) INSULATOR: PTFE, VIRGIN ELECTRICAL GRADE
- 5.) HOUSING: ALUMINUM, CLEAR CHEM CONVERSION FILM, RoHS COMPLIANT (NO HEX CHROM)
- 6.) SOLDER: LEAD FREE, RoHS COMPLIANT
- 7.) OPERATING TEMP: -65°C TO +85°C
- 8.) WEIGHT: 1150 GRAMS

**RF INPUT POWER RATING (POWER DIVIDER SPLITTER):**

| INTO MATCHED LOAD VSWR's | IN-PHASE | 180° OUT-OF-PHASE |
|--------------------------|----------|-------------------|
| 1.2 : 1                  | 20 WATTS | 20 WATTS          |
| 2.0 : 1                  | 20 WATTS | 20 WATTS          |
| ∞                        | 10 WATTS | 2 WATTS           |

**RF INPUT POWER RATING (POWER COMBINER):**

|                                      |                 |
|--------------------------------------|-----------------|
| COHERENT SIGNALS (IN-PHASE)          | 12 X 1.67 WATTS |
| COHERENT SIGNALS (180° OUT-OF-PHASE) | 12 X 0.17 WATTS |
| NON-COHERENT SIGNALS                 | 12 X 0.33 WATTS |
| OTHER CONDITIONS - CONSULT FACTORY   |                 |



**12-way, GPS signal splitter; DC pass 1 port, DC block 11 ports w/200Ω loads. Typically used for powering an active antenna thru DC pass port while splitting the GPS signal.**

| REV | DESCRIPTION | BY | DATE |
|-----|-------------|----|------|
|     |             |    |      |

| TOLERANCES     |                |
|----------------|----------------|
| INCHES         | MILLIMETERS    |
| .00 = ±.01     | .0 = ±.25      |
| .000 = ±.004   | .00 = ±.10     |
| DRAWN: MJD     | APPROVED: EMM  |
| DATE: 10/06/09 | DATE: 10/06/09 |



|           |  |
|-----------|--|
| MODEL NO. | <b>GPS122</b>  |
| TITLE     | GPS SPLITTER, 12 WAY, TNC FEMALE, 1 - 2 GHz, 20 WATTS, RoHS, DC BLOCK 11 PORTS, WITH 200Ω INTERNAL LOADS |