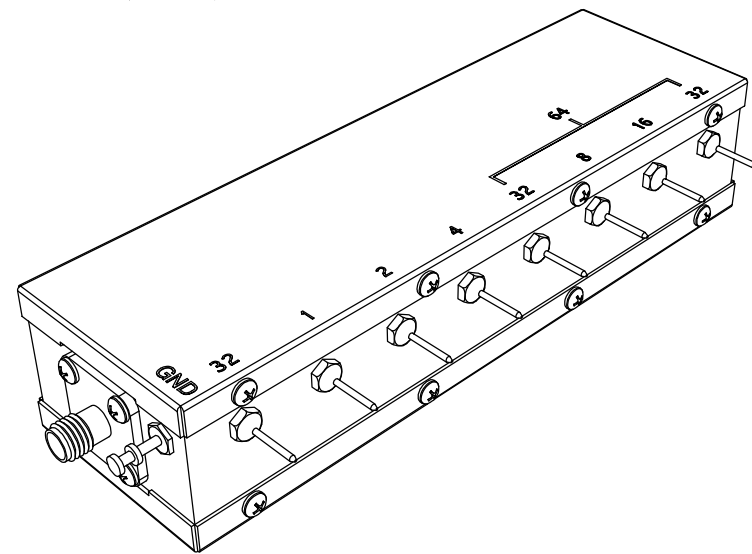
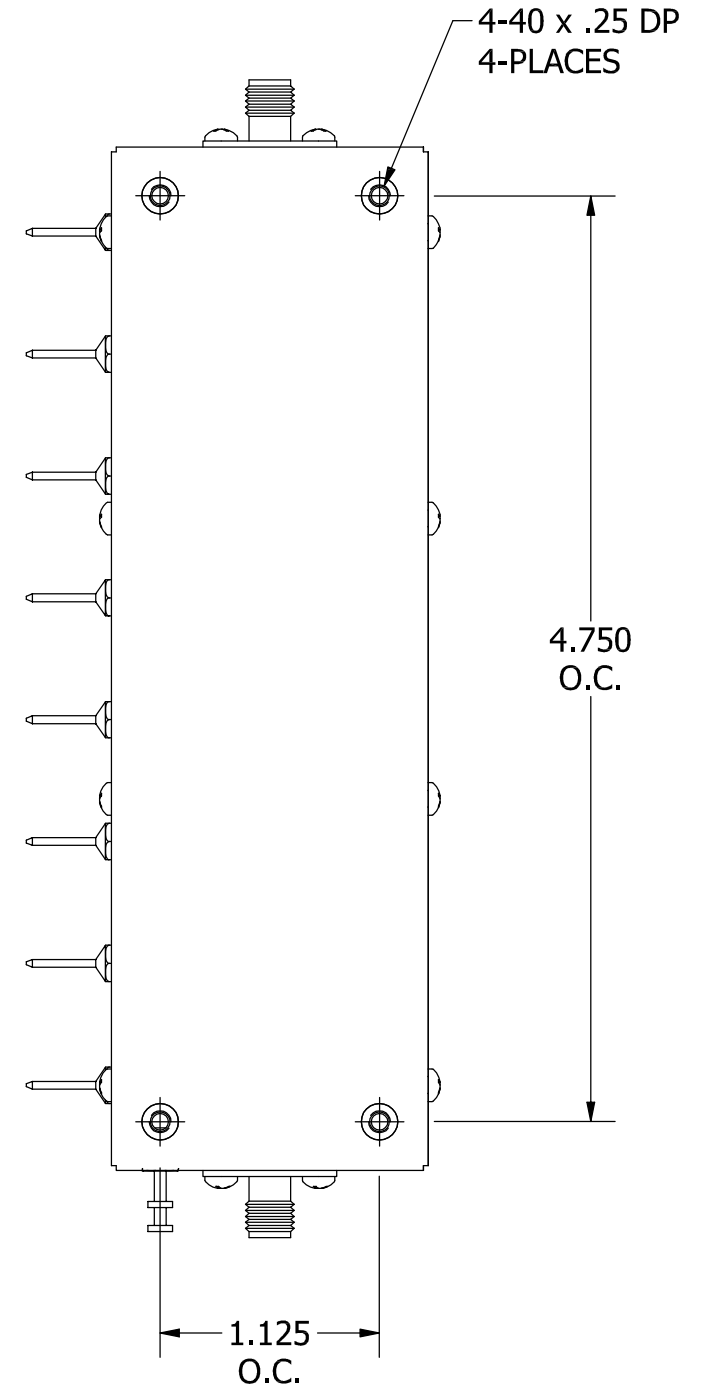
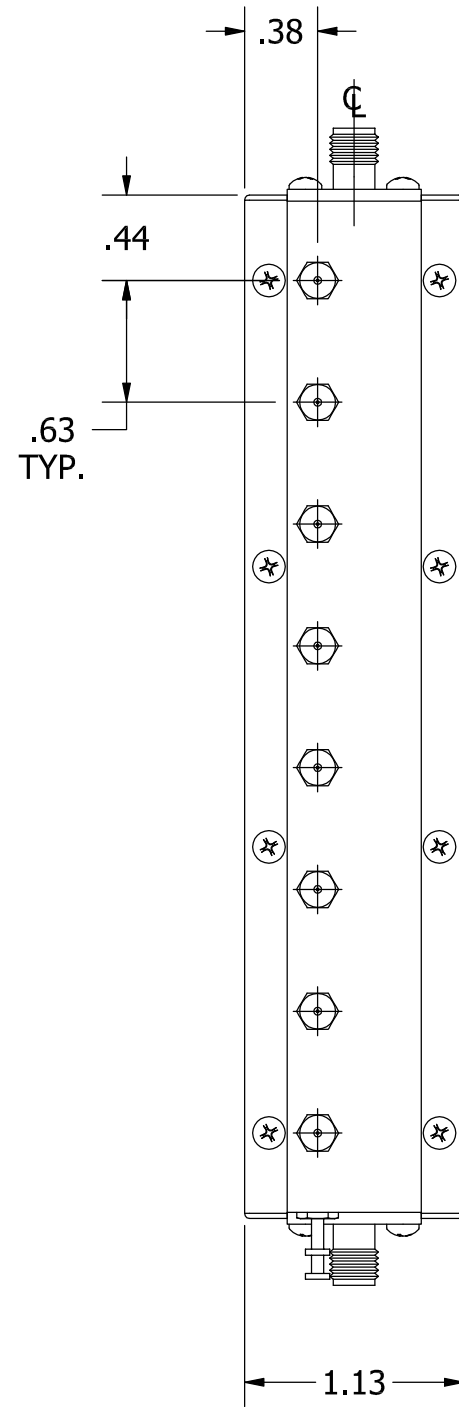
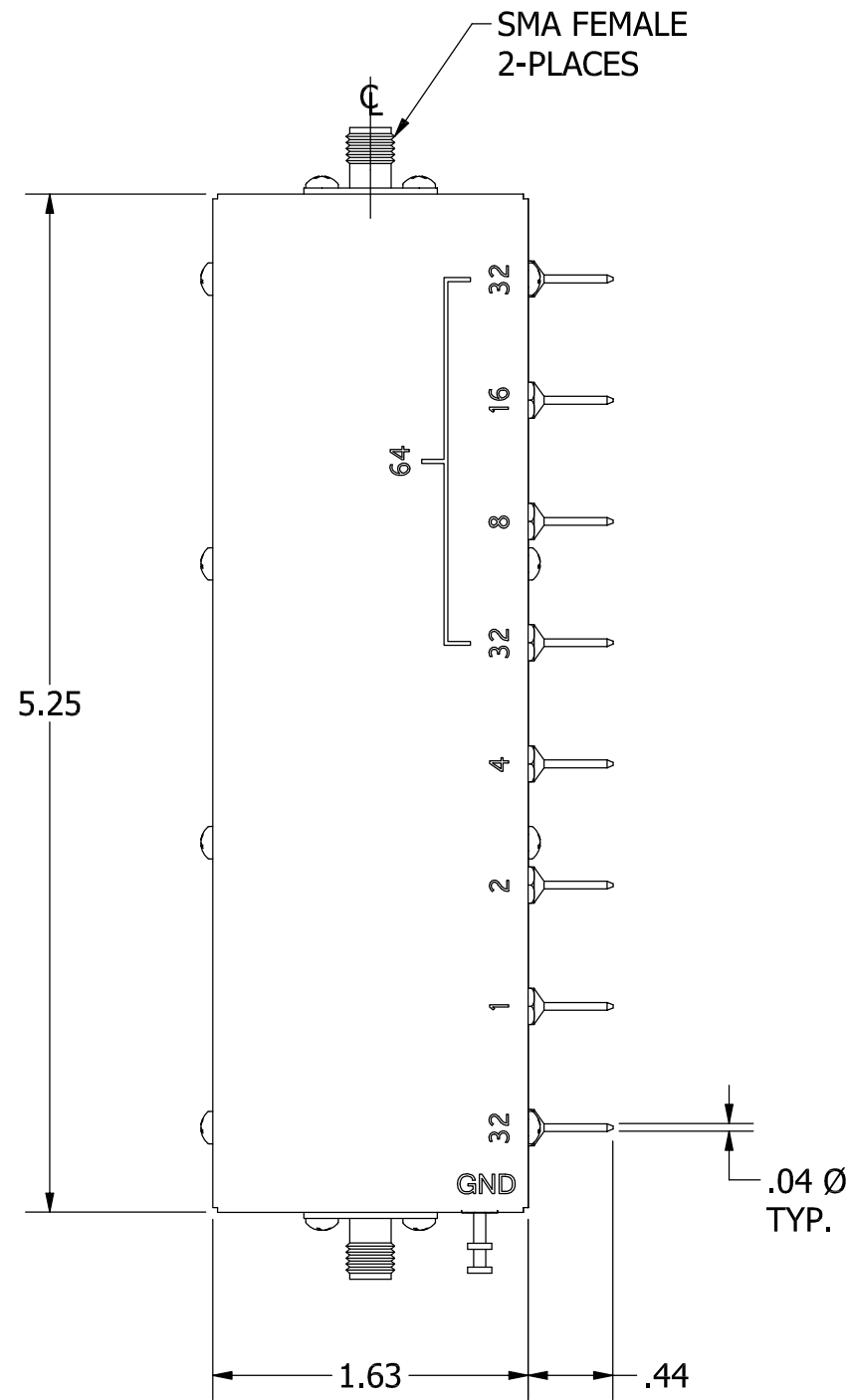


**SPECIFICATION SHEET**  
**JFW MODEL 50P-1976**  
**RELAY PROGRAMMABLE ATTENUATOR**


JFW Industries, Inc.  
 Phone: 317-887-1340  
 sales@jfwindustries.com  
 www.jfwindustries.com

|                             |  |
|-----------------------------|--|
| Frequency Range             | DC-1000 MHz  |
| Impedance                   | 50 Ohms nominal  |
| Attenuation Range           | 0-127 dB in 1 dB steps   |
| Attenuation Steps           | 1, 2, 4, 8, 16, 32, and 64 dB  |
| VSWR                        | 1.4:1 maximum<br>< 1.3:1 typical   |
| Attenuation Accuracy        | ± 0.5 dB maximum (1-31 dB)<br>± 1.0 dB maximum (32-127 dB)   |
| Insertion Loss              | 2.00 dB maximum<br>0.27 dB typical @ 100 MHz<br>0.39 dB typical @ 250 MHz<br>0.69 dB typical @ 500 MHz<br>1.49 dB typical @ 1000 MHz |
| RF Input Power              | 2 Watts average @ +40°C<br>Derated to 1 Watt average @ +85°C   |
| Switching Speed             | 6 milliseconds   |
| Control                     | +12 Vdc @ 15 mA per relay<br>(8 relays total)  |
| DC Connector                | 0.040" diameter solder terminals   |
| RF Connector                | BNC, TNC, N, or SMA  |
| Operating Temperature Range | -20°C to +85°C   |
| Physical Size               | See outline drawing 092-7815   |

| ECR/ECN # | DATE       | REV | APPR / DATE    | ECR/ECN # | DATE | REV | APPR / DATE |
|-----------|------------|-----|----------------|-----------|------|-----|-------------|
|           | 09/17/2013 |     | TRS 09/17/2013 |           |      |     |             |
| 27772     | 05/10/2017 | A   | CLK 05/10/2017 |           |      |     |             |



| REV | ECN    | DATE     | BY | APPR |
|-----|--------|----------|----|------|
| -   | ISSUED | 9-10-13  | JZ | TEZ  |
| A   | 24444  | 10-22-15 | JZ | TEZ  |
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|  <b>JFW INDUSTRIES, INC.</b><br><a href="http://www.jfwindustries.com">www.jfwindustries.com</a> PH: 317-887-1340 |                         | PROPRIETARY INFORMATION                                |
|  |                         | ALL SURFACES ARE TO BE FREE OF BURRS, PITS & SCRATCHES |
| MATERIAL   | BRASS                   | TOLERANCES   |
| FINISH   | NICKEL                  | .XX±.010 .XXX±.005 XX°±.5°                             |
| MODEL  | 50P-XXXX                | SCALE FULL   |
| DESCRIPTION  | PROGRAMMABLE ATTENUATOR | DWG #  |
|  |                         | 092-7815   |