

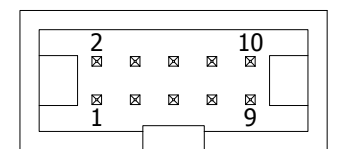
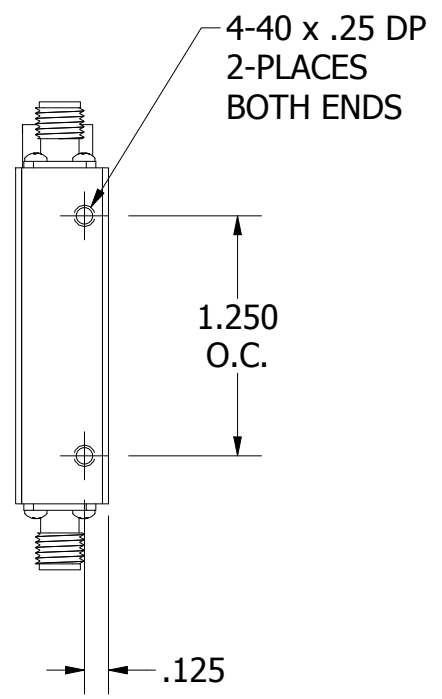
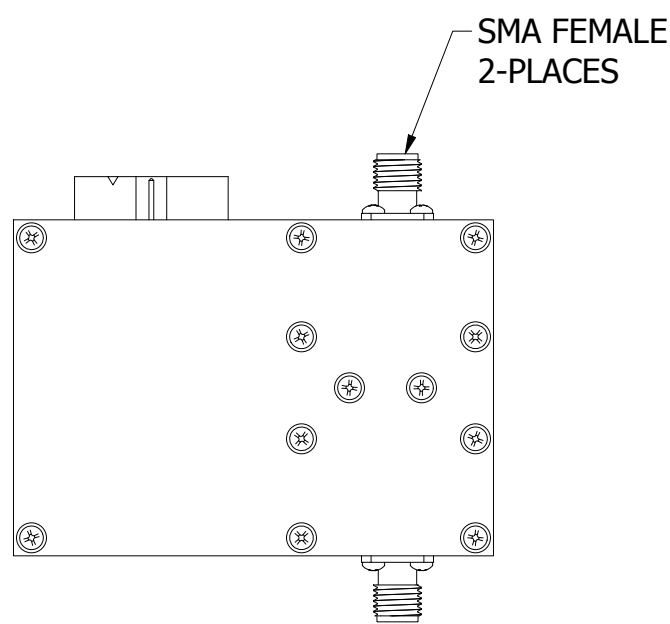
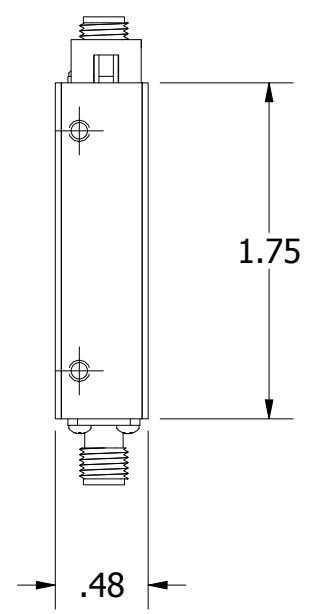
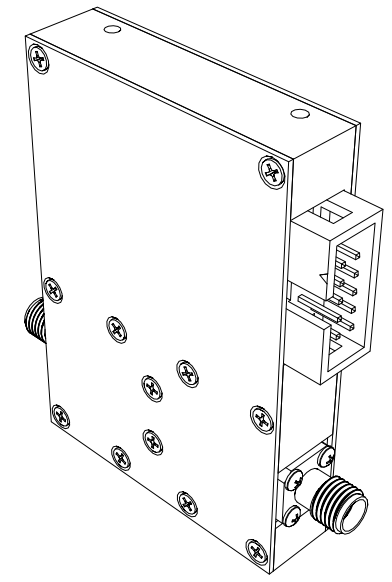
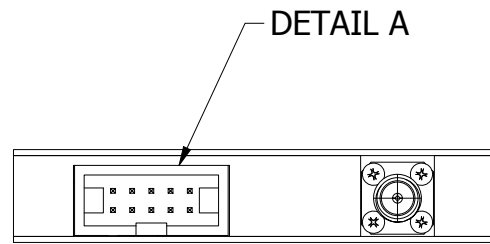
SPECIFICATION SHEET**JFW MODEL 50P-1891****SOLID STATE PROGRAMMABLE ATTENUATOR**

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

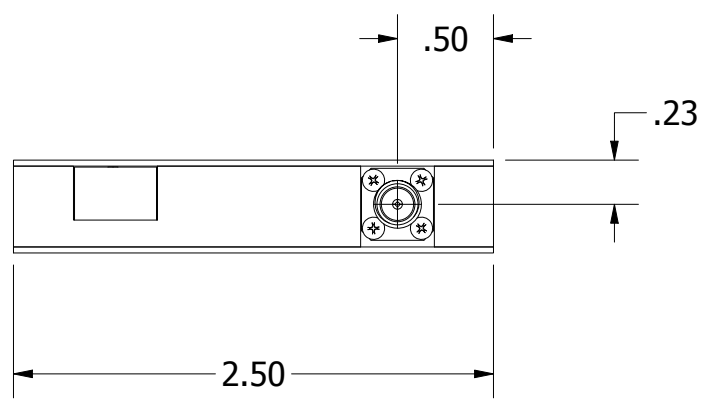
Frequency Range	30-3000 MHz
Impedance	50 Ohms nominal
Attenuation Range	0-63.5 dB in 0.5 dB steps
Attenuation Steps	0.5, 1, 2, 4, 8, 16 and 32 dB
VSWR	1.8:1 maximum 30-800 MHz 1.5:1 maximum 800-3000 MHz
Attenuation Accuracy (guaranteed monotonic)	± 0.3 dB 0.5-7.5 dB ± 0.5 dB or 2% 8.0-63.5 dB (whichever is greater)
Insertion Loss	4.0 dB maximum 2.2 dB typical @ 30 MHz 3.5 dB typical @ 3000 MHz
RF Input Power*	+27 dBm (operating) +33 dBm (no damage)
Switching Speed	4 microseconds maximum / 0.7 microseconds typical
Harmonic Distortion	-108 dBm typical @ 800MHz (tested with +0 dBm @ 400MHz)
3rd Order Intercept Point	+55dBm typical (tested with two +0dBm tones at 445 and 450 MHz)
Spurious Emissions (2.2 MHz switching frequency of internal DC/DC converter)	-110dBm maximum -140dBm typical
DC Supply	+5Vdc @ 2mA nominal
Control Logic (7 Lines)	TTL Low for Thru Path TTL High for Attenuation
DC Connector	3M #D2510-6002 (mating connector 3M #3473-6610)
RF Connector	SMA
Operating Temperature Range	-40°C to +85°C
Outline Drawing Numbers	092-7462-07 (SMA female/female) 092-7462-08 (SMA male/female)

* Units shipped before 12/29/2017 (date code 1752) are only rated at +20dBm maximum. The JFW date code is a four digit code (YYWW) that follows the six digit serial number. For example date code 1908 is the 8th week of 2019.

ECR/ECN #	DATE	REV	APPR / DATE	ECR/ECN #	DATE	REV	APPR / DATE
26371	03/07/2016	D	CLK 03/07/2016	29124	11/06/2018	G	CLK 11/06/2018
28384	12/29/2017	E	CLK 12/29/2017	29548	05/21/2019	H	CLK 05/21/2019
28925	08/01/2018	F	CLK 08/01/2018	29857	10/02/2019	I	TRS 10/02/2019



DETAIL A
3M #D2510-6002-AR
OR EQUIVALENT



PIN	FUNCTION
1	.25dB TTL CONT.
2	.5dB TTL CONT.
3	1dB TTL CONT.
4	2dB TTL CONT.
5	4dB TTL CONT.
6	8dB TTL CONT.
7	16dB TTL CONT.
8	NO CONNECTION
9	DC SUPPLY
10	GROUND

REV	ECN	DATE	BY	APPR
-	ISSUED	2-13-13	TEZ	CLK
A	24444	10-12-15	JZ	TEZ
B	29124	6-18-19	ICC	JZ



JFW INDUSTRIES, INC.

www.jfwindustries.com

PH: 317-887-1340

MATERIAL	ALUMINUM ALLOY	PROPRIETARY INFORMATION
FINISH	ELECTROLESS NICKEL	ALL SURFACES ARE TO BE FREE OF BURRS, PITS & SCRATCHES
MODEL	50P-XXXX	TOLERANCES .XX±.010 .XXX±.005 XX*±.5°
DESCRIPTION	PROGRAMMABLE ATTENUATOR	DWG # 092-7462-15