## 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

50 Ohms nominal Impedance

0-63.5 dB in 0.5 dB steps Attenuation Range

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

0.5-7.5 dB Attenuation Accuracy  $\pm$  0.3 dB ± 0.5 dB or 2% 8.0-63.5 dB (guaranteed monotonic)

(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 -110dBm maximum (2.2 MHz switching frequency of -140dBm typical

internal DC/DC converter)

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	Н	CLK 05/21/2019
28925	08/01/2018	F	CLK 08/01/2018	29857	10/02/2019	I	TRS 10/02/2019

Page 1 of 1 JFW FORM E-7-F REV F