

SPECIFICATION SHEET

JFW MODEL 50P-591

RELAY PROGRAMMABLE ATTENUATOR

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

Frequency Range DC-3000 MHz

Impedance 50 Ohms nominal

Attenuation Range 0-85 dB in 1 dB steps

Attenuation Steps 1, 2, 4, 8, 10, 20, and 40 dB

VSWR 1.5:1 maximum
1.4:1 typical

Attenuation Accuracy ± .3 dB or 0.5% DC-500 MHz
± .4 dB or 1.0% 500-1000 MHz
± .5 dB or 1.0% 1000-2000 MHz
± .6 dB or 1.5% 2000-3000 MHz
(whichever is greater)

Insertion Loss 3.0 dB maximum DC-1000 MHz
4.0 dB maximum 1000-2000 MHz
5.0 dB maximum 2000-3000 MHz

Repeatability ± 0.05 dB @ 2.0 GHz typical
± 0.10 dB @ 2.5 GHz typical
± 0.15 dB @ 3.0 GHz typical

RF Input Power 1 Watt average

Switching Speed 6 milliseconds

Control +12 Vdc @ 30 mA per relay

Lifetime (typical) 10 million cycles per relay

DC Connector Solder terminals

RF Connector N, TNC or SMA female

Operating Temperature Range -40°C to +95°C

Physical Size See outline drawing 092-1285

ECR/ECN #	DATE	REV	APPR / DATE	ECR/ECN #	DATE	REV	APPR / DATE
	02/27/1989			27192	10/24/2016	C	CLK 10/24/2016
9999	10/05/2002	A	TRS 10/24/2002	30049	12/09/2019	D	CLK 12/09/2019
11007	04/13/2005	B	CLK 04/13/2005				

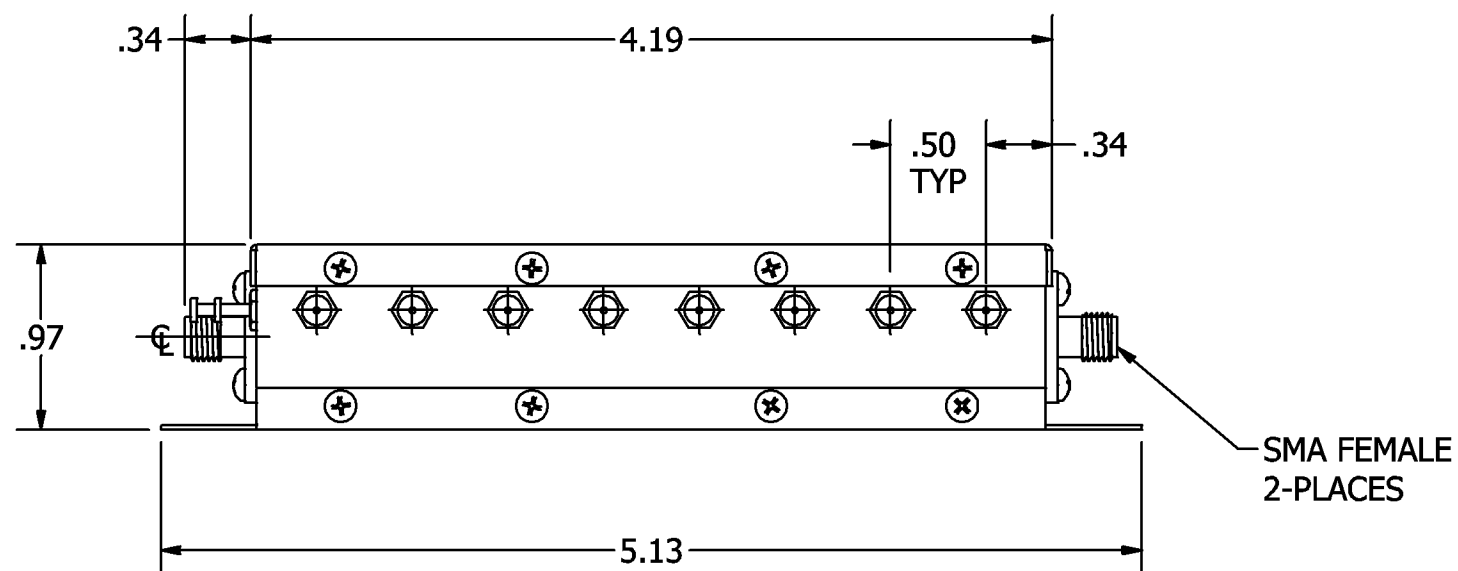
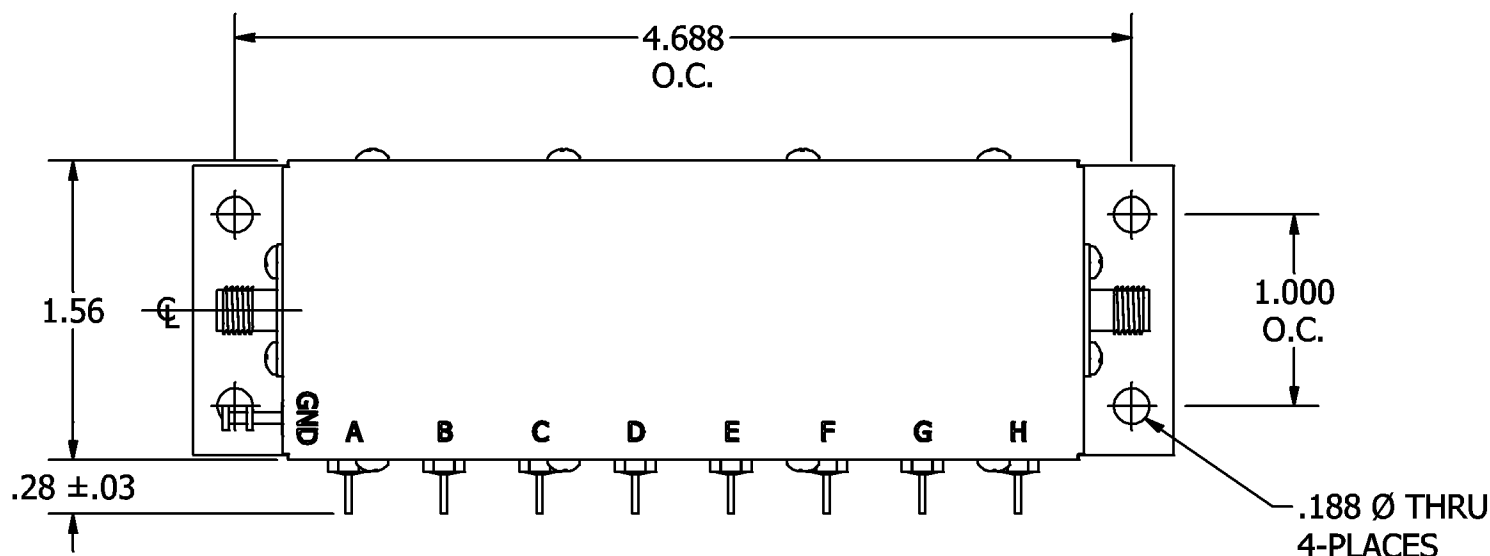
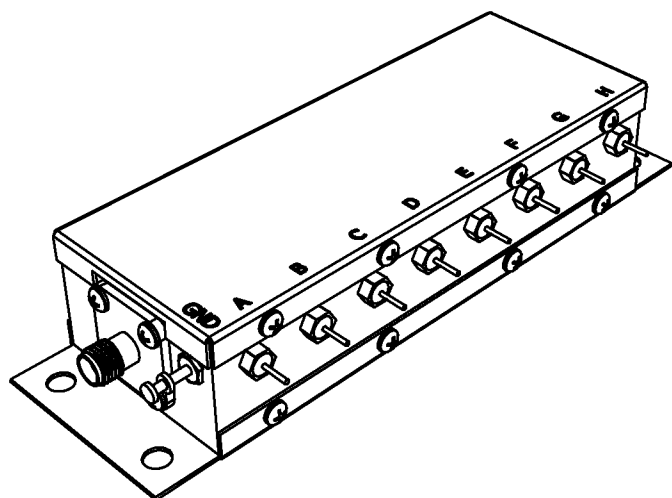
PIN	50P-1455/1654
A	.2dB
B	.4dB
C	.8dB
D	1dB
E	2dB
F	4dB
G	8dB
H	16dB

PIN	50P-1224
A	.5dB
B	1dB
C	2dB
D	4dB
E	8dB
F	16dB
G/H	32dB

PIN	50P-058/591/1245
A	1dB
B	2dB
C	4dB
D	8dB
E	10dB
F	20dB
G/H	40dB

PIN	50P-792/905
A	.1dB
B	.2dB
C	.4dB
D	.8dB
E	1.6dB
F	3.2dB
G	6.4dB
H	12.8dB

PIN	50P-1799
A	5dB
B	10dB
C	10dB
D	20dB
E/F	40dB
G/H	40dB



REV	ECN	DATE	BY	APPR	REV	ECN	DATE	BY	APPR
-	ISSUED	2-20-89	PT	FDW	P	24444	10-13-15	JZ	TEZ
A	3199	3-4-91	PT	FDW	Q	27900	05-31-17	CDC	TEZ
B	3671	6-29-92	TEZ	FDW					
C	4606	3-17-95	TEZ	FDW					
D	4826	11-22-95	CDJ	FDW					
E	4828	11-28-95	CDJ	FDW					
F	5326	7-18-97	PT	FDW					
G	5520	12-23-97	TEZ	FDW					
H	5964	3-18-99	PT	FDW					
J	6024	5-27-99	PT	FDW					
K	6083	8-9-99	TEZ	FDW					
L	6405	9-11-00	CMB	PT					
M	10103	11-1-04	DTS	TRS					
N	14917	10-31-07	BZ	TEZ					



JFW INDUSTRIES, INC.

www.jfwindustries.com

PH: 317-887-1340

MATERIAL	BRASS	PROPRIETARY INFORMATION
FINISH	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 #
		092-1285