

Plug-In Attenuator/Switch

PAS-2+

50Ω Bi-Phase 10 to 1000 MHz



CASE STYLE: A01
PRICE: \$50.20 ea. QTY. (1-9)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Control Current	30mA

Pin Connections

INPUT	1
OUTPUT	8
CONTROL	3,4^
GROUND	2,5,6,7
CASE GROUND	2,5,6,7

^ pins must be connected together externally

Features

- wideband, 10 to 1000 MHz
- hermetic case
- high in-out isolation
- excellent amplitude and phase unbalance

Applications

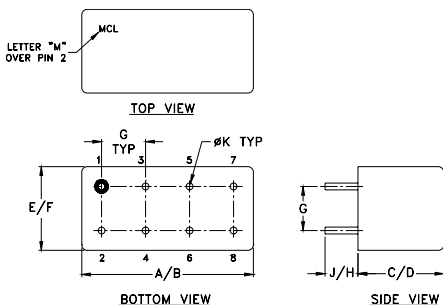
- bi-phase modulator
- electronic attenuator
- military hi-rel applications

Attenuator/Switch Electrical Specifications

FREQUENCY (MHz)	INSERTION LOSS (dB) ±20 mA	MAX. INPUT PWR (dBm) ±20 mA	IN-OUT ISOLATION (dB) 0 mA			BI-PHASE X̄ (±20 mA) Typ.	
			L	M	U	Δ AMP (dB)	Phase (deg.) deviation from 180°
10-1000	DC-0.05	20 29	50 40	40 30	35 25	0.1 0.3	0.5 1.0

L = low range [f_L to $10 f_L$] M = mid range [$10 f_L$ to $f_U/2$] U = upper range [$f_U/2$ to f_U] m = [2 f_L to $f_U/2$]
Performance specifications apply for input power up to 10 dB below stated 1 dB compression.

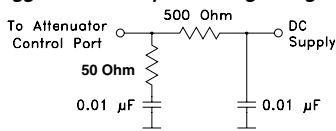
Outline Drawing



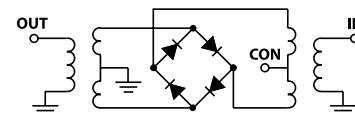
Outline Dimensions (inch/mm)

A	B	C	D	E	F
.770	.800	.385	.400	.370	.400
19.56	20.32	9.78	10.16	9.40	10.16
G	H	J	K	wt	
.200	.20	.14	.031		grams
5.08	5.08	3.56	0.79		5.2

suggested control port biasing configuration

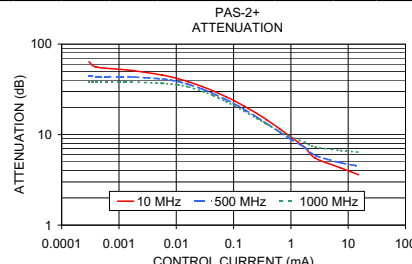
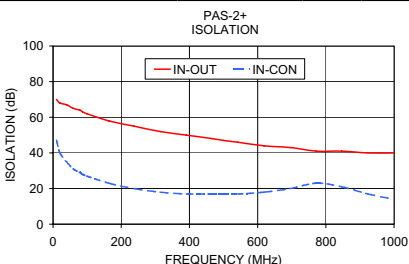
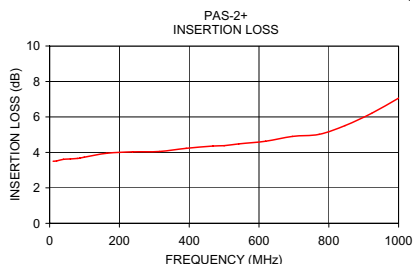


electrical schematic



Typical Performance Data

Freq. (MHz)	I. Loss (dB) at 20mA	±Control Δ AMP (dB)		20mA Δ Phase (deg.)	Isolation (dB) (in-out) (in-con)		Input R. Loss (dB)	Control Current (mA)	Attenuation (dB)			Phase Δ ref at 15mA Ctrl deg.			Input VSWR		
		x	σ		x	x			x	x	10 MHz	500 MHz	1000 MHz	10 MHz	500 MHz	1000 MHz	10 MHz
10.0	3.50	0.025	0.01	180.00	70	47	12.3	0.0000	71.8	43.8	38.2	-37.1	96.0	63.6	3.6	2.9	7.5
19.9	3.52	0.015	0.01	180.00	68	40	12.7	0.0003	63.7	44.2	38.1	-34.3	93.2	62.4	3.6	2.9	7.5
39.7	3.61	0.008	0.01	179.90	67	35	12.6	0.0004	55.7	43.8	38.1	-12.5	86.0	57.8	3.6	2.9	7.5
59.5	3.63	0.006	0.01	179.90	65	31	12.5	0.0016	51.2	43.3	38.1	-8.5	80.1	52.8	3.6	2.8	7.4
79.3	3.66	0.006	0.01	179.90	64	29	12.5	0.0057	45.4	41.1	36.8	-4.6	55.5	35.7	3.6	2.8	7.3
86.7	3.68	0.006	0.01	179.90	63	28	12.5	0.0105	41.5	38.6	35.6	-1.2	42.6	23.4	3.5	2.8	7.1
99.1	3.73	0.006	0.01	179.90	62	27	12.4	0.0161	38.3	36.0	33.7	1.5	34.4	12.9	3.5	2.8	6.9
163.5	3.95	0.006	0.01	179.80	58	23	12.3	0.0286	33.9	31.8	30.1	3.6	24.5	0.6	3.4	2.7	6.6
237.7	4.03	0.007	0.01	179.70	55	20	12.1	0.0437	30.3	28.4	27.1	4.3	20.7	-5.6	3.3	2.6	6.2
314.4	4.05	0.008	0.01	179.37	52	18	12.0	0.0734	26.2	24.4	23.2	5.1	16.3	-9.9	3.1	2.4	5.6
391.2	4.23	0.012	0.02	179.60	50	17	12.1	0.1029	23.6	21.8	20.8	5.0	14.4	-11.4	2.9	2.3	5.2
467.9	4.36	0.017	0.04	179.60	48	17	12.3	0.1510	20.7	19.1	18.2	5.0	12.8	-11.9	2.7	2.1	4.7
500.1	4.38	0.021	0.04	179.60	47	17	12.4	0.2540	17.1	15.6	15.1	4.6	10.4	-11.1	2.4	1.8	4.0
542.1	4.48	0.027	0.06	179.50	46	17	12.5	0.3743	14.6	13.3	13.1	4.3	9.0	-9.9	2.1	1.6	3.6
618.9	4.63	0.040	0.10	179.50	44	18	12.6	0.6438	11.5	10.6	10.8	3.5	6.9	-7.5	1.7	1.3	3.1
695.6	4.90	0.053	0.13	179.60	43	20	12.1	0.9350	9.7	9.1	9.6	3.0	5.4	-6.0	1.5	1.2	2.9
772.3	5.02	0.064	0.16	179.38	41	23	10.8	1.7496	7.2	7.2	8.2	2.0	3.6	-3.6	1.2	1.1	2.7
846.6	5.51	0.073	0.16	179.70	41	21	9.1	2.6537	5.5	5.9	7.3	1.3	1.9	-1.8	1.2	1.3	2.7
923.3	6.21	0.087	0.21	179.80	40	17	7.5	7.3045	4.3	4.9	6.7	0.5	0.6	-0.7	1.4	1.5	2.6
1000.0	7.06	0.093	0.36	180.40	40	14	6.3	15.1437	3.6	4.5	6.4	0.1	0.1	-0.1	1.5	1.6	2.6



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