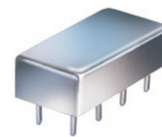


Plug-In Attenuator/Switch

50Ω Bi-Phase 100 to 2000 MHz

PAS-2000



CASE STYLE: A05
PRICE: \$29.70 ea. QTY. (1-9)

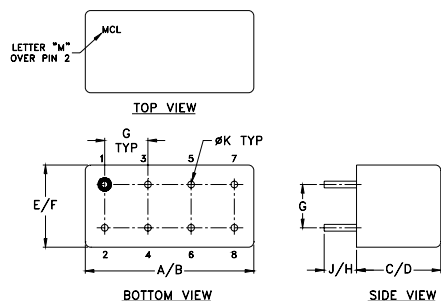
Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Control Current	30mA
Permanent damage may occur if any of these limits are exceeded.	

Pin Connections

INPUT	1
OUTPUT	8
CONTROL	3
GROUND	2,5,6,7
CASE GROUND	2,5,6,7
NOT USED	4

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	
.770	.800	.240	.250	.370	.400	
19.56	20.32	6.10	6.35	9.40	10.16	
G	H	J	K			wt
.200	.20	.14	.031			grams
5.08	5.08	3.56	0.79			3.7

Features

- wideband, 100 to 2000 MHz
- excellent amplitude and phase unbalance
- low profile, rugged shielded case

Applications

- bi-phase modulator

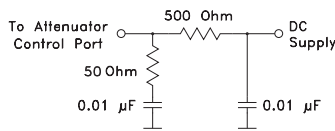
Attenuator/Switch Electrical Specifications

FREQUENCY (MHz)	INSERTION LOSS (dB) ±20 mA	MAX. INPUT PWR (dBm) ±20 mA	IN-OUT ISOLATION (dB) 0 mA						BI-PHASE \bar{X} (±20 mA) Typ. Δ AMP (dB) Phase (deg.) deviation from 180°								
			Mid-Band m		Total Range		L		M		U		Total				
IN f_L - f_U	CON	Typ. Max.	Typ. Max.	Typ. Max.	1 dB compr.	no damage	Typ. Min.	Typ. Min.	Typ. Min.	Typ. Min.	m	Range	m	Range			
100-2000	DC-0.5	4.2	6.5	5.4	7.5	19*	25	30	22	—	—	26	20	0.3	0.4	5.0	8.0

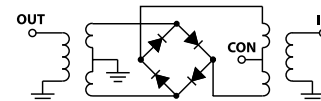
L = low range [f_L to $10 f_L$] M = mid range [$10 f_L$ to $f_U/2$] U = upper range [$f_U/2$ to f_U] m = [$2 f_L$ to $f_U/2$]
* 15 dBm from 100-800 MHz.

Performance specifications apply for input power up to 10 dB below stated 1 dB compression.

suggested control port biasing configuration

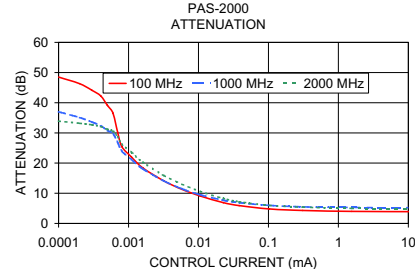
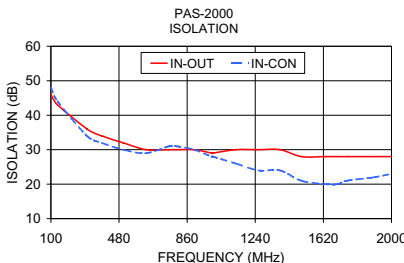
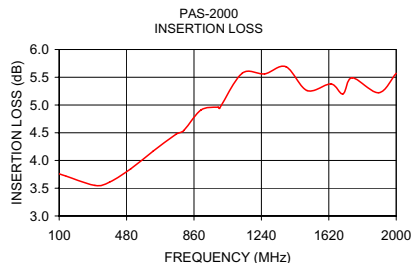


electrical schematic



Typical Performance Data

Freq. (MHz)	I. Loss (dB) at 20mA	±Control Δ AMP (dB)	20mA Δ Phase (deg.)	Isolation (dB) (in-out)	Input R. Loss (dB)	Control Current (mA)	Attenuation (dB)			Phase Δ ref at 15mA Ctrl (deg.)			Input VSWR				
							100 MHz	1000 MHz	2000 MHz	100 MHz	1000 MHz	2000 MHz	100 MHz	1000 MHz	2000 MHz		
100.0	3.76	0.01	0.02	179.40	46.00	48.00	9.50	0.00	51.00	38.90	34.40	89.60	18.60	46.60	1.60	4.70	2.90
137.1	3.72	0.00	0.01	179.00	43.00	44.00	10.20	0.00	48.50	37.00	33.90	91.30	12.90	42.20	1.60	4.70	2.90
301.5	3.55	0.00	0.03	178.20	36.00	34.00	11.00	0.00	46.30	35.10	33.20	89.80	8.70	35.10	1.60	4.60	2.90
383.8	3.61	0.00	0.04	177.70	34.00	32.00	10.50	0.00	44.10	33.60	32.70	85.50	5.80	31.00	1.50	4.60	2.90
503.4	3.85	0.01	0.08	177.10	32.00	30.00	9.30	0.00	42.30	32.40	32.10	84.80	2.40	27.00	1.50	4.60	2.90
630.4	4.17	0.03	0.18	176.40	30.00	29.00	7.90	0.00	39.10	30.80	31.20	78.50	-1.40	21.20	1.50	4.60	2.90
757.5	4.47	0.06	0.21	176.30	30.00	31.00	6.90	0.00	36.50	29.70	30.60	71.50	-4.80	16.80	1.50	4.50	2.90
802.4	4.54	0.06	0.22	176.40	30.00	31.00	6.70	0.00	30.20	26.80	28.70	53.50	-12.00	6.90	1.50	4.40	2.80
899.5	4.91	0.11	0.27	176.10	30.00	30.00	6.30	0.00	25.50	24.00	26.30	43.00	-15.60	-0.90	1.40	4.20	2.70
996.7	4.96	0.11	0.28	175.90	29.00	28.00	6.20	0.00	22.00	21.20	23.60	36.60	-16.40	-5.90	1.40	4.00	2.60
1004.2	4.94	0.12	0.28	175.80	29.00	28.00	6.20	0.00	18.40	18.10	20.30	31.00	-16.00	-8.80	1.30	3.70	2.40
1131.3	5.57	0.16	0.36	175.70	30.00	26.00	6.40	0.00	14.10	14.10	15.90	24.30	-13.70	-9.80	1.20	3.30	2.00
1258.3	5.56	0.11	0.36	175.50	30.00	24.00	7.00	0.01	11.30	11.50	13.00	19.50	-11.10	-8.90	1.20	3.10	1.80
1377.9	5.69	0.05	0.37	175.50	30.00	24.00	7.70	0.01	9.10	9.50	10.60	14.80	-8.60	-7.50	1.30	3.00	1.60
1497.5	5.26	0.05	0.33	175.20	28.00	21.00	8.70	0.02	6.90	7.70	8.30	9.50	-5.50	-5.40	1.50	2.90	1.40
1632.1	5.38	0.05	0.27	174.70	28.00	20.00	10.00	0.04	5.90	6.90	7.20	6.70	-4.00	-4.00	1.60	2.90	1.40
1699.4	5.20	0.07	0.29	174.20	28.00	20.00	10.80	0.10	4.80	6.00	6.00	3.20	-2.00	-2.10	1.80	3.00	1.50
1751.7	5.49	0.07	0.27	174.20	28.00	21.00	11.30	0.31	4.30	5.50	5.40	1.30	-0.90	-1.00	1.90	3.00	1.60
1901.2	5.22	0.09	0.23	173.00	28.00	22.00	12.40	1.55	4.00	5.30	5.00	0.40	-0.40	-0.40	2.00	3.00	1.70
2000.0	5.57	0.16	0.25	172.70	28.00	23.00	12.50	15.11	3.90	5.20	4.90	0.10	-0.10	0.00	2.00	3.10	1.70



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