

50Ω Bi-Phase

10 to 1000 MHz

Maximum Ratings

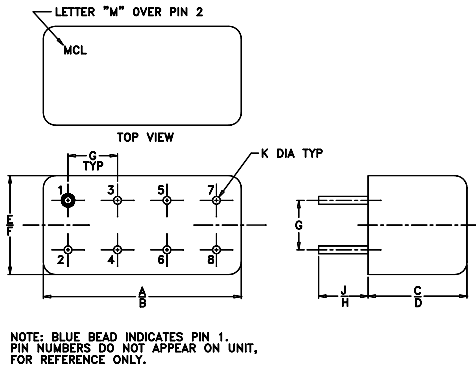
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Control Current	30mA

Pin Connections

INPUT	1
OUTPUT	8
CONTROL	3,4 [^]
GROUND EXT.	2,5,6,7
CASE GROUND	2,5,6,7

[^]pins must be connected together externally

Outline Drawing



Outline Dimensions (inch/mm)

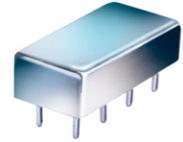
A	B	C	D	E	F
.770	.800	.240	.250	.370	.400
19.56	20.32	6.10	6.35	9.40	10.16
G	H	J	K		wt
.200	.20	.14	.031		grams
5.08	5.08	3.56	0.79		3.7

Features

- wideband, 10 to 1000 MHz
- rugged, shielded case

Applications

- bi-phase modulator



CASE STYLE: A05

PRICE: \$15.95 ea. QTY (1-9)

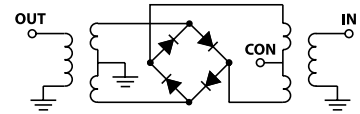
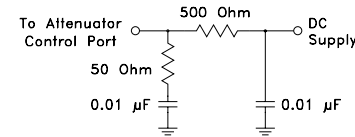
Attenuator/Switch Electrical Specifications

FREQUENCY (MHz)		INSERTION LOSS (dB) ±20 mA				MAX. INPUT PWR (dBm) ±20 mA		IN-OUT ISOLATION (dB) 0 mA						BI-PHASE X (±20 mA) Typ.			
IN	CON	Mid-Band		Total Range		1dB compr.	no damage	L		M		U		Δ AMP (dB)	Phase(deg) deviation from 180°		
		m	Typ.	Max.	Typ.			Max.	Typ.	Min.	Typ.	Min.	Typ.			Min.	
f _c -f _u		Typ.	Max.	Typ.	Max.			Typ.	Min.	Typ.	Min.	Typ.	Min.	m	Total Range	m	Total Range
10-1000	DC-0.05	4.3	6	5.2	8.5	20	25	55	40	35	25	28	20	0.10	0.3	1.5	3.0

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 = mid band [$2f_L$ to $f_U/2$]

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

suggested control port biasing configuration



Typical Performance Data

Freq. (MHz)	I. Loss (dB) at 20mA		±Control Δ Amp (dB)	20mA ΔPhase (deg.)	Isolation (dB) (in-out) (in-con)		Input R. Loss (dB)	Control Current (mA)	Attenuation (dB)			PhaseΔ ref at 15mA Ctrl			Input VSWR		
	10	500	1000	10	500	1000			10	500	1000	10	500	1000			
	MHz	MHz	MHz	MHz	MHz	MHz			MHz	MHz	MHz	MHz	MHz	MHz			
	x	σ	x	x	x̄	x̄	x̄					deg.	deg.	deg.			
10.00	3.50	0.25	0.10	180.00	70.00	47.00	12.30	0.00	71.80	43.80	38.20	-37.10	96.00	63.60	3.60	2.90	7.50
19.90	3.52	0.15	0.10	180.00	68.00	40.00	12.70	0.00	63.70	44.20	38.10	-34.30	93.20	62.40	3.60	2.90	7.50
39.70	3.61	0.08	0.10	179.90	67.00	35.00	12.60	0.00	55.70	43.80	38.10	-12.50	86.00	57.80	3.60	2.90	7.50
59.50	3.63	0.06	0.10	179.90	65.00	31.00	12.50	0.00	51.20	43.30	38.10	-8.50	80.10	52.80	3.60	2.80	7.40
79.30	3.66	0.06	0.10	179.90	64.00	29.00	12.50	0.01	45.40	41.10	36.80	-4.60	55.50	35.70	3.60	2.80	7.30
86.70	3.68	0.06	0.10	179.90	63.00	28.00	12.50	0.01	41.50	38.60	35.60	-1.20	42.60	23.40	3.50	2.80	7.10
99.10	3.73	0.06	0.10	179.90	62.00	27.00	12.40	0.02	38.30	36.00	33.70	1.50	34.40	12.90	3.50	2.80	6.90
163.50	3.95	0.06	0.10	179.80	58.00	23.00	12.30	0.03	33.90	31.80	30.10	3.60	24.50	0.60	3.40	2.70	6.60
237.70	4.03	0.07	0.10	179.70	55.00	20.00	12.10	0.04	30.30	28.40	27.10	4.30	20.70	-5.60	3.30	2.60	6.20
314.40	4.05	0.08	0.10	179.37	52.00	18.00	12.00	0.07	26.20	24.40	23.20	5.10	16.30	-9.90	3.10	2.40	5.60
391.20	4.23	0.12	0.20	179.60	50.00	17.00	12.10	0.10	23.60	21.80	20.80	5.00	14.40	-11.40	2.90	2.30	5.20
467.90	4.36	0.17	0.40	179.60	48.00	17.00	12.30	0.15	20.70	19.10	18.20	5.00	12.80	-11.90	2.70	2.10	4.70
500.10	4.38	0.21	0.40	179.60	47.00	17.00	12.40	0.25	17.10	15.60	15.10	4.60	10.40	-11.10	2.40	1.80	4.00
542.10	4.48	0.27	0.60	179.50	46.00	17.00	12.50	0.37	14.60	13.30	13.10	4.30	9.00	-9.90	2.10	1.60	3.60
618.90	4.63	0.40	0.10	179.50	44.00	18.00	12.60	0.64	11.50	10.60	10.80	3.50	6.90	-7.50	1.70	1.30	3.10
695.60	4.90	0.53	0.13	179.60	43.00	20.00	12.10	0.94	9.70	9.10	9.60	3.00	5.40	-6.00	1.50	1.20	2.90
772.30	5.02	0.64	0.16	179.38	41.00	23.00	10.80	1.75	7.20	7.20	8.20	2.00	3.60	-3.60	1.20	1.10	2.70
846.60	5.51	0.73	0.16	179.70	41.00	21.00	9.10	2.65	5.50	5.90	7.30	1.30	1.90	-1.80	1.20	1.30	2.70
923.30	6.21	0.87	0.21	179.80	40.00	17.00	7.50	7.30	4.30	4.90	6.70	0.50	0.60	-0.70	1.40	1.50	2.60
1000.00	7.06	0.93	0.36	180.40	40.00	14.00	6.30	15.14	3.60	4.50	6.40	0.10	0.10	-0.10	1.50	1.60	2.60

