

Surface Mount Voltage Variable Attenuator

NEW!
EVA-3000

50Ω, 50 to 3000 MHz

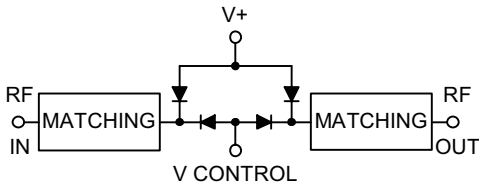
Maximum Ratings

Operating Temperature	-45°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Supply Voltage(V+)	7V
Absolute Max. Control Voltage(Vctrl)	9V
Absolute Max. RF Input Level	+22 dBm

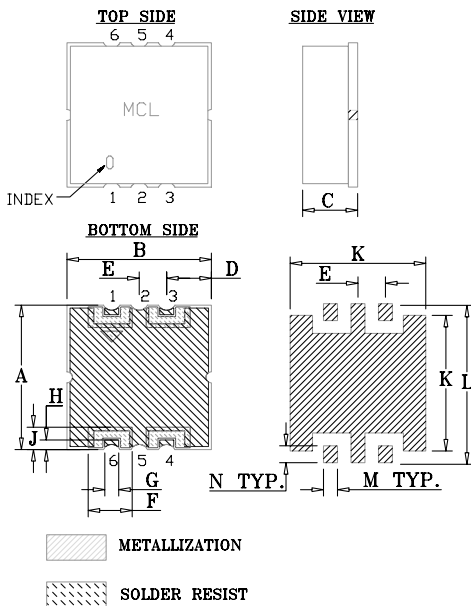
Pin Connections

RF IN	1
RF OUT	6
V CONTROL	3
V+	4
GROUND	2,5

Equivalent schematic



Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
.394	.394	.150	.122	.075	.120	.038
10.01	10.01	3.81	3.10	1.90	3.05	0.97
H	J	K	L	M	N	wt.
.026	.061	.370	.434	.038	.046	grams
0.66	1.55	9.40	11.02	0.97	1.17	0.7

Features

- frequency range, 50-3000 MHz
- IP3, 48 dBm typ.
- Maximum attenuation at minimum current
- No external bias and RF matching network required
- Small size, shielded case
- Low cost, \$4.99 ea (qty.1K)



Applications

- Variable gain amplifier
- Feed forward amplifiers
- ALC circuits

CASE STYLE: HE1135
PRICE: \$9.95 ea. QTY (10-49)

Electrical Specifications @ 25°C

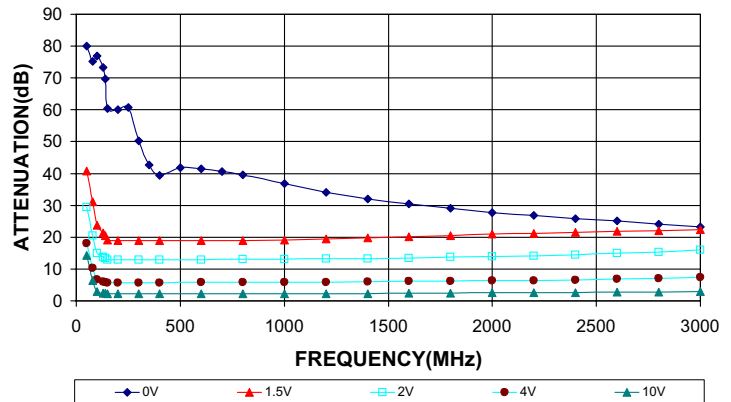
FREQ (MHz)	INSERTION LOSS (dB)		ATTENUATION (dB)		IP3 (dBm)	RETURN LOSS (dB)	POWER SUPPLY Voltage Currnet (V) (mA)		CONTROL Voltage Current (V) Max.	
Min. Max.	at 8V control voltage Typ. Max.		at 0V control voltage Typ. Min		Typ.	Typ.	Max.		(mA)	
50 - 1000	2.5	4.0	43	27	41	21	+5	5	0 - 8	40
1000 - 2000	3.0	4.5	29	21	45	22	+5	5	0 - 8	40
2000 - 3000	3.5	5.5	24	17	44	18	+5	5	0 - 8	40

Notes:

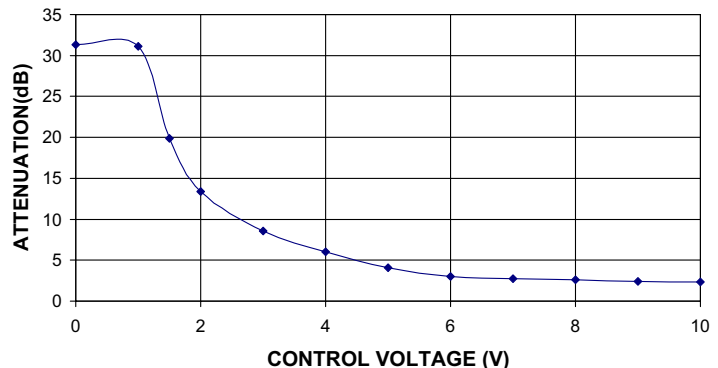
Rise/Fall time: 15μSec/36μSec Typ.

Switching Time, turn on/off: 40μSec. Typ.

EVA-3000 ATTENUATION Vs. FREQUENCY Vs. CONTROL VOLTAGE



EVA-3000 TYPICAL ATTENUATION AT 1500MHz



Mini-Circuits®

INTERNET <http://www.minicircuits.com>

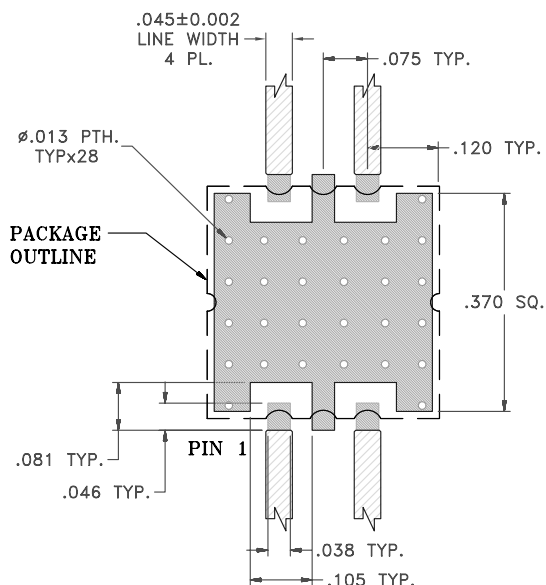
P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661

Distribution Centers NORTH AMERICA 800-654-7949 • 417-335-5935 • Fax 417-335-5945 • EUROPE 44-1252-832600 • Fax 44-1252-837010

Mini-Circuits ISO 9001 & ISO 14001 Certified

REV. OR
M98730
EVA-3000
EDR-7165/2
RAV
050703

Demo Board MCL P/N: TB-335 Suggested PCB Layout (PL-187)



NOTE:

1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS. $.025" \pm .002"$. COPPER: 1/2 OZ. EACH SIDE.
FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.



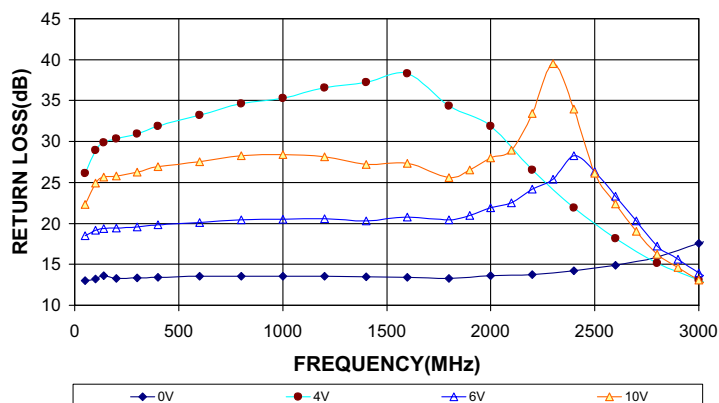
DENOTES PCB COPPER LAYOUT



DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK

Performance Curves

EVA-3000
INPUT RETURN LOSS Vs. FREQUENCY
Vs. CONTROL VOLTAGE



EVA-3000
OUTPUT RETURN LOSS Vs. FREQUENCY
Vs. CONTROL VOLTAGE

