

Surface Mount Voltage Variable Attenuator

EVA-23-75+

75Ω 10 to 2000 MHz

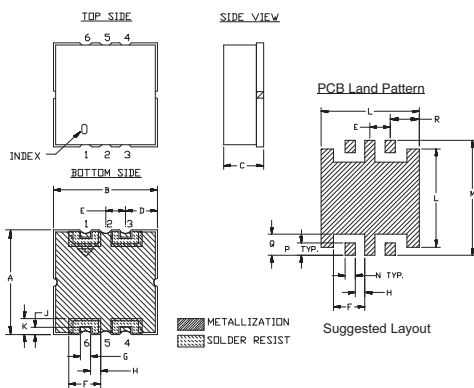
Maximum Ratings

Operating Temperature	-45°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage(V+)	6V
Absolute Max. Control Voltage(Vctrl)	10V
Absolute Max. RF Input Level	+22dBm
Permanent damage may occur if any of these limits are exceeded.	

Pin Connections

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

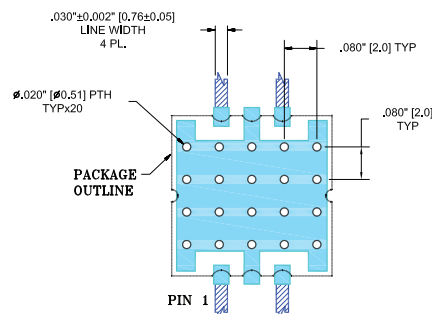
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	
.394	.394	.150	.122	.075	.120	.038	.037	
10.01	10.01	3.81	3.10	1.90	3.05	0.97	0.94	
J	K	L	M	N	P	Q	R	wt.
.026	.061	.370	.434	.038	.046	.081	.110	grams
0.66	1.55	9.40	11.02	0.97	1.17	2.06	2.79	0.7

Demo Board MCL P/N: TB-381
Suggested PCB Layout (PL-238)



NOTE:

- TRACE WIDTH IS SHOWN FOR R04350 WITH DIELECTRIC THICKNESS .030"±.002". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
- BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)

DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK

Features

- Frequency range, 10-2000 MHz
- High IP3, 50 dBm typ.
- Maximum attenuation at minimum current
- No external bias and RF matching network required
- Small size, shielded case
- Aqueous washable

Applications

- CATV
- Variable gain amplifiers
- Feed forward amplifiers
- ALC circuits



CASE STYLE: HE1135

PRICE: \$10.95 ea. QTY (10-49)

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

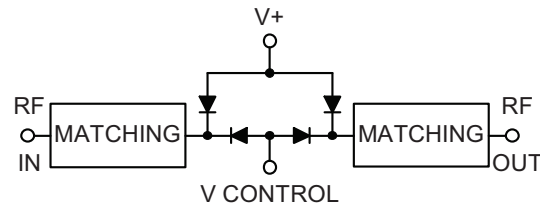
Electrical Specifications (T_{AMB} = 25°C)

FREQ. (MHz)		MIN. INSERTION LOSS, dB (+8V)		MAX. ATTENUATION dB (0V)		INPUT POWER (dBm)	CONTROL Voltage Current		IP3 (dBm)	RETURN LOSS (dB)	POWER SUPPLY Voltage Current	
Min.	Max.	Typ.	Max.	Typ.	Min.	Max.	(V)	(mA)	Typ.	Typ.	(V)	(mA)
10 - 1000		4.5	5.5	40	25	+22	0 - 8	15	48	19	+3	4
1000 - 2000		5.0	6.0	27	18	+22	0 - 8	15	52	14	+3	4

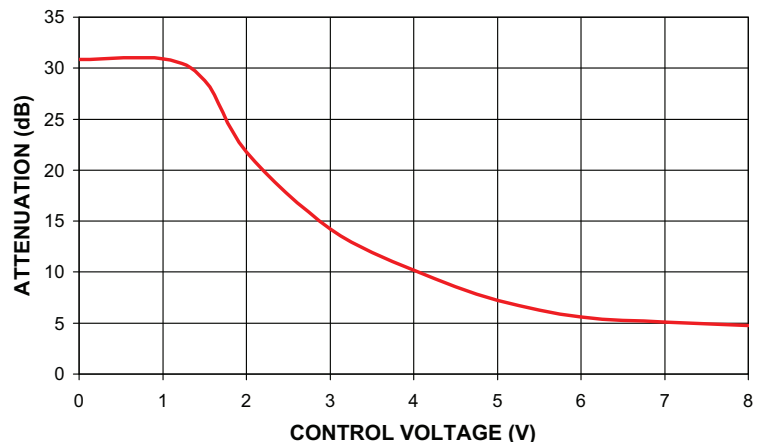
Notes:

- Rise/Fall time: 15μSec Typ.
Switching Time, turn on/off: 20μSec. Typ.

Equivalent Schematic



EVA-23-75+ TYPICAL ATTENUATION AT 1000 MHz



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IF/RF MICROWAVE COMPONENTS

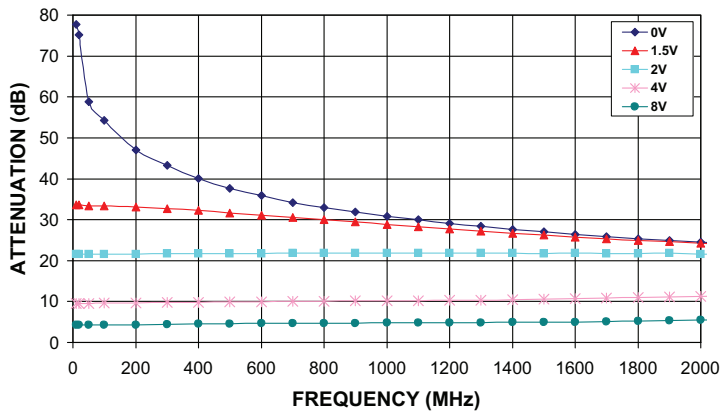
For detailed performance specs
& shopping online see web site

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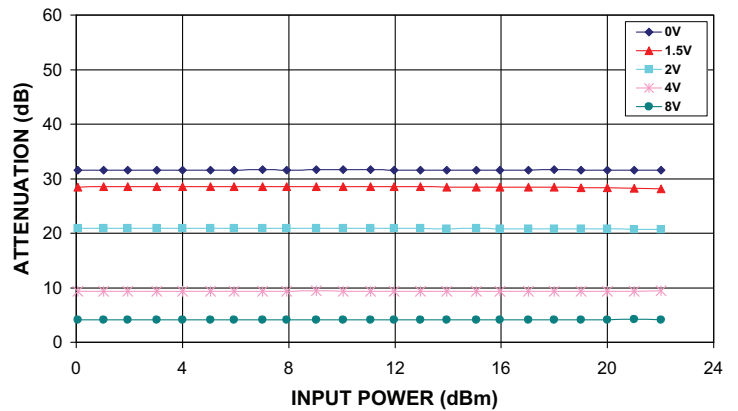
Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp.

REV. OR
M110422
EDR-8397U
EVA-23-75+
URJ/RAV
121023
Page 1 of 2

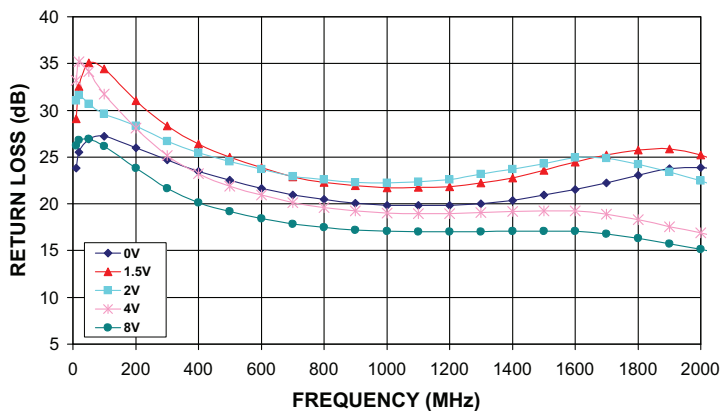
**EVA-23-75+
ATTENUATION Vs. FREQUENCY
OVER CONTROL VOLTAGES**



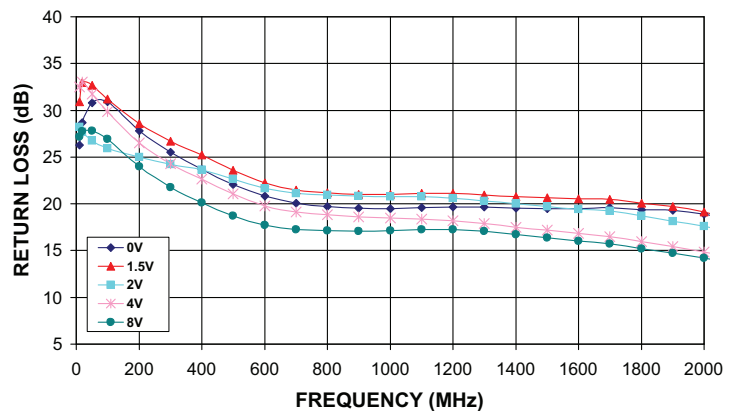
**EVA-23-75+
ATTENUATION Vs. INPUT POWER
OVER CONTROL VOLTAGES AT 1000MHz**



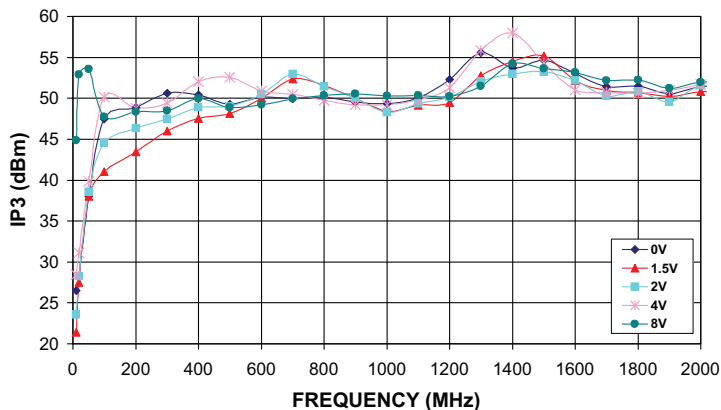
**EVA-23-75+
INPUT RETURN LOSS Vs. FREQUENCY
OVER CONTROL VOLTAGES**



**EVA-23-75+
OUTPUT RETURN LOSS Vs. FREQUENCY
OVER CONTROL VOLTAGES**



**EVA-23-75+
IP3 Vs. FREQUENCY
OVER CONTROL VOLTAGES**



**EVA-23-75+
PHASE SHIFT Vs. FREQUENCY
OVER CONTROL VOLTAGES**

