

Broad Band Voltage Variable Attenuator

RVA-2000V3+

50Ω 50 to 2000 MHz

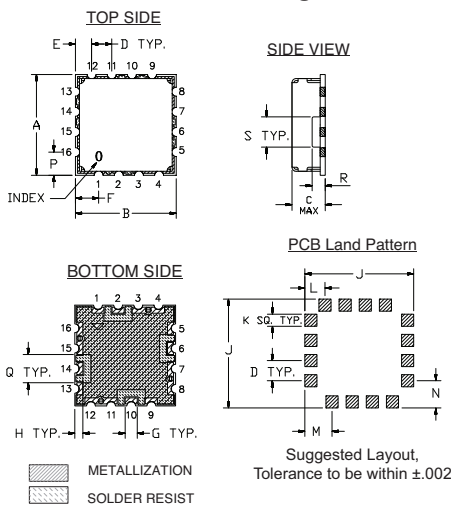
Maximum Ratings

Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 85°C
Absolute Max. Supply Voltage(V+)	6V
Absolute Max. Control Voltage(Vctrl)	12V
Absolute Max. RF Input Level	+18dBm
Permanent damage may occur if any of these limits are exceeded.	

Pin Connections

RF IN	2
RF OUT	10
V CONTROL	6
V+	14
GROUND	1,3,4,5,7,8,9,11,12,13,15,16

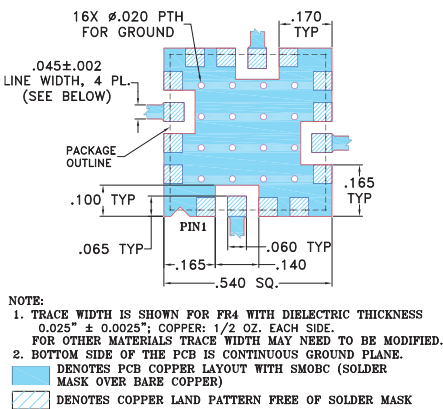
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J
.500	.500	.195	.100	.080	.115	.060	.040	.540
12.70	12.70	4.95	2.54	2.03	2.92	1.52	1.02	13.72
K	L	M	N	P	Q	R	S	wt.
.060	.100	.135	.135	.115	.140	.070	.150	grams
1.52	2.54	3.43	3.43	2.92	3.56	1.78	3.81	1.0

Demo Board MCL P/N: TB-163 Suggested PCB Layout (PL-040)



Features

- Broadband, 50-2000 MHz
- IP3, +50 dBm typ.
- Good VSWR at IN/OUT ports over attenuation range
- No external bias and RF matching network required
- Shielded case
- Aqueous washable



CASE STYLE: DV874
PRICE: \$ 11.95 ea. QTY (10-49)

Applications

- Power level control
- Feed forward amplifiers

+RoHS Compliant

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

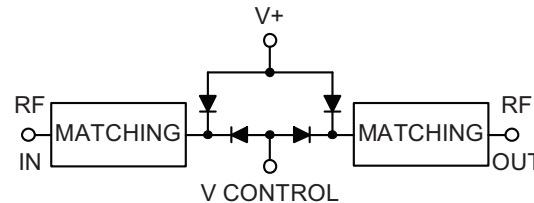
Electrical Specifications (T_{AMB} = 25°C)

FREQ. (MHz)	MIN. INSERTION LOSS, dB (+10V)		MAX. ATTENUATION dB (0V)		INPUT POWER (dBm)	CONTROL Voltage Current (V) (mA)		IP3 (dBm)	RETURN LOSS (dB)	POWER SUPPLY Voltage Current (V) (mA)	
	Min.	Max.	Typ.	Min.		Max.	Typ.			Max.	Typ.
50 - 1000	4.0	5.0	55	35	+18	0 - 10	20	48	25	+3	5
1000 - 2000	4.5	6.0	40	30	+18	0 - 10	20	50	20	+3	5

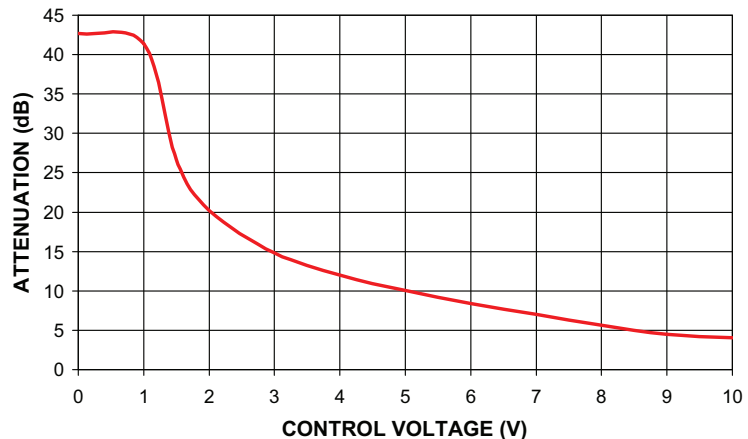
Notes:

Rise/Fall time: 20µSec/20µSec Typ.
Switching Time, turn on/off: 25µSec. Typ.

Equivalent Schematic



RVA-2000V3+ TYPICAL ATTENUATION AT 900 MHz



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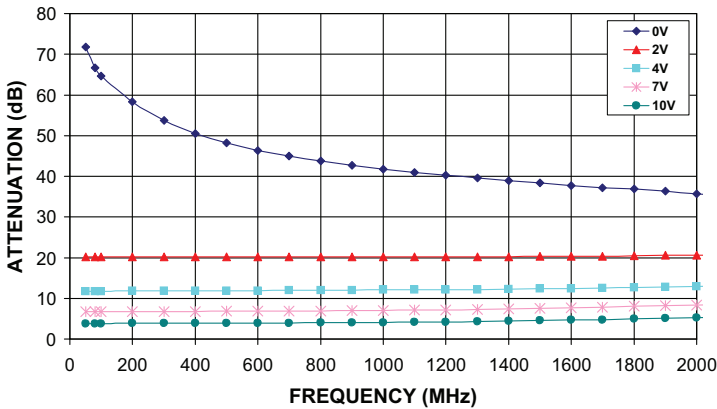
For detailed performance specs & shopping online see web site

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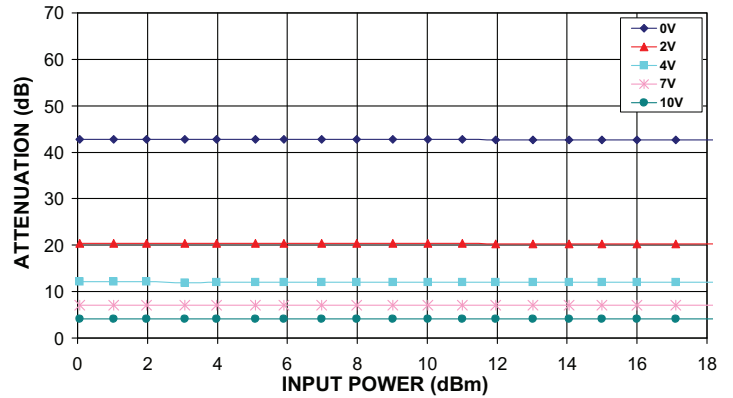
Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established 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
M114801
EDR-7165/4UF+
RVA-2000V3+
URJ/RAV
121023
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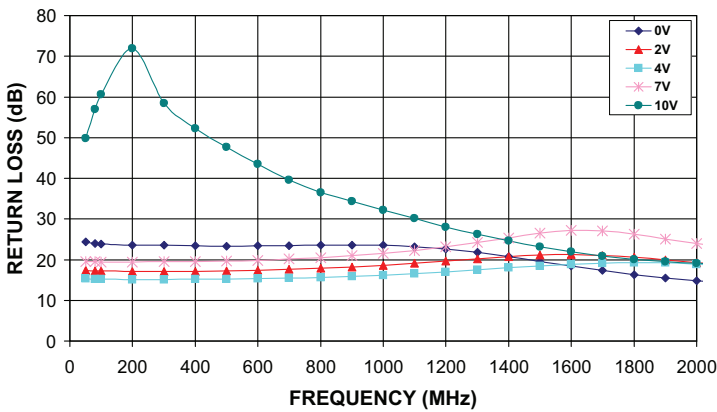
**RVA-2000V3+
ATTENUATION Vs. FREQUENCY
OVER CONTROL VOLTAGES**



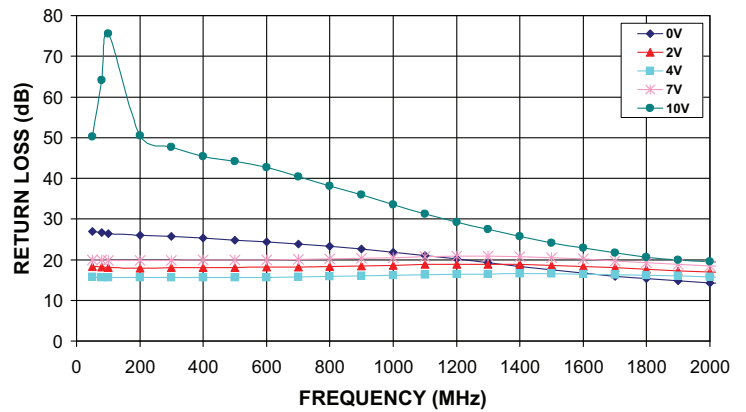
**RVA-2000V3+
ATTENUATION Vs. INPUT POWER
OVER CONTROL VOLTAGES AT 900 MHz**



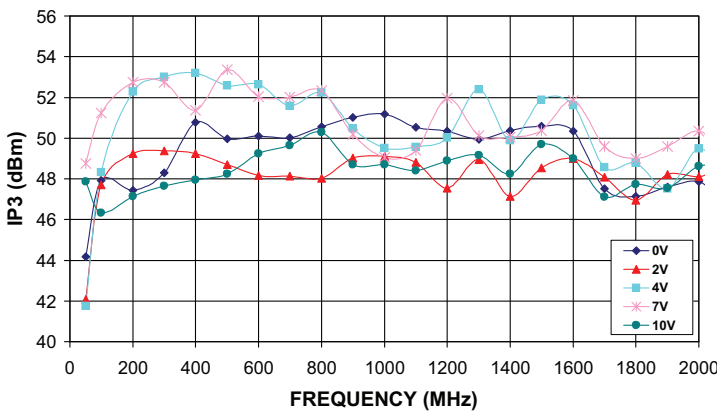
**RVA-2000V3+
INPUT RETURN LOSS Vs. FREQUENCY
OVER CONTROL VOLTAGES**



**RVA-2000V3+
OUTPUT RETURN LOSS Vs. FREQUENCY
OVER CONTROL VOLTAGES**



**RVA-2000V3+
IP3 Vs. FREQUENCY
OVER CONTROL VOLTAGES**



**RVA-2000V3+
PHASE SHIFT Vs. FREQUENCY
OVER CONTROL VOLTAGES**

