

Broad Band Voltage Variable Attenuator

RVA-2000V3+

50Ω 50 to 2000 MHz

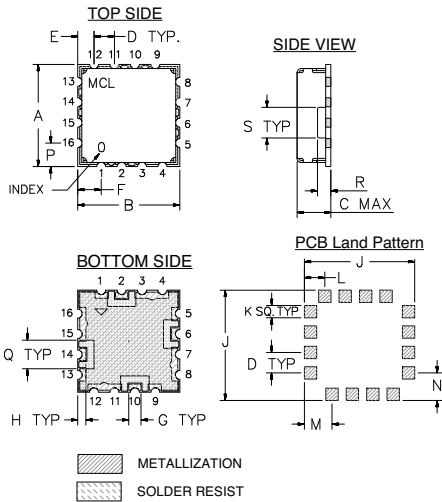
Maximum Ratings

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

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

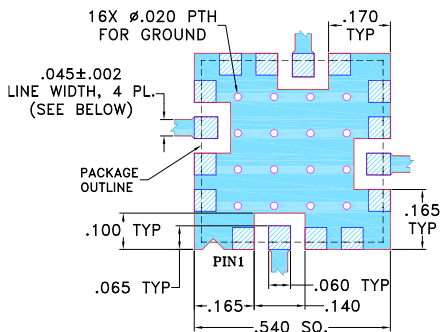
Outline Drawing



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)



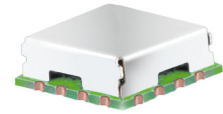
- TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS 0.025" ± 0.0025"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED
 - BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

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

Applications

- Power level control
- Feed forward amplifiers



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

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

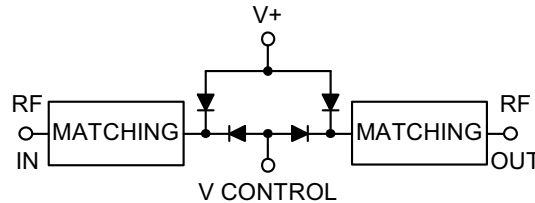
Electrical Specifications (T_{AMB} = 25°C)

FREQ. (MHz)	MIN. INSERTION LOSS, dB (+10V)		MAX. ATTENUATION dB (0V)		INPUT POWER (dBm)	CONTROL Voltage Current (mA)		IP3 (dBm)	RETURN LOSS (dB)	POWER SUPPLY Voltage Current (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

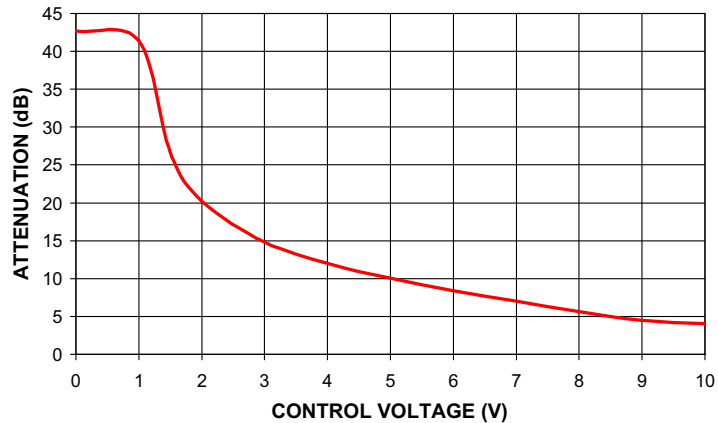
Notes:

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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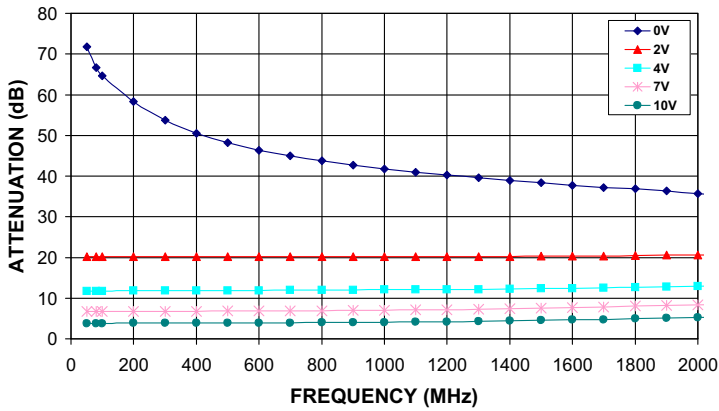


The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

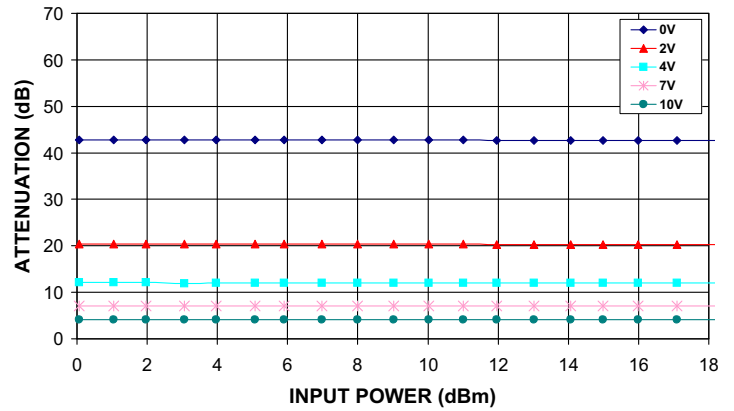
RF/IF MICROWAVE COMPONENTS

REV. OR
M114801
EDR-7165/4UF1
RVA-2000V3+
URJ/RAV
071204
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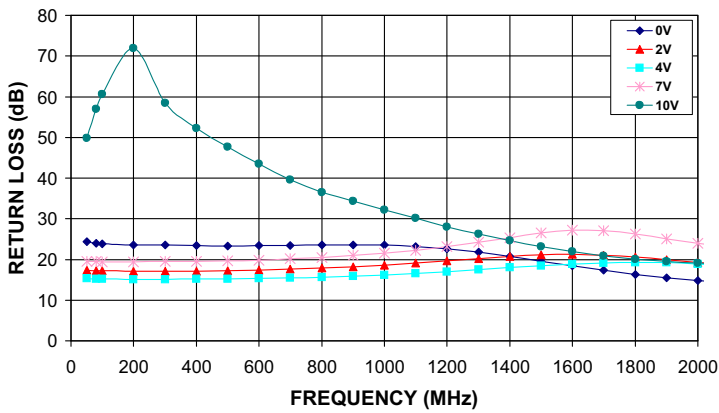
**RVA-2000V3+
ATTENUATION Vs. FREQUENCY
OVER CONTROL VOLTAGES**



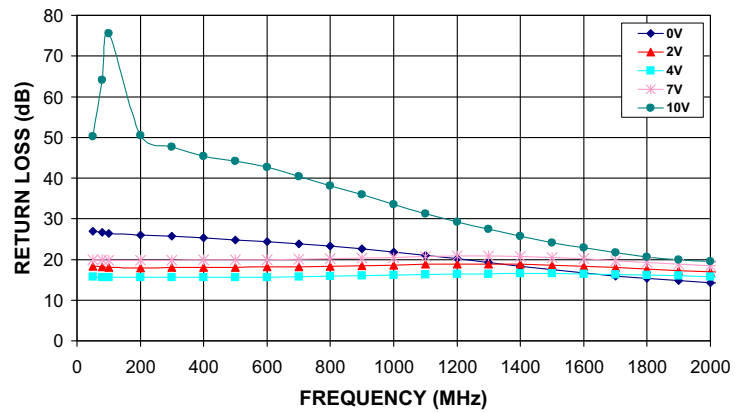
**RVA-2000V3+
ATTENUATION Vs. INPUT POWER
OVER CONTROL VOLTAGES AT 900 MHz**



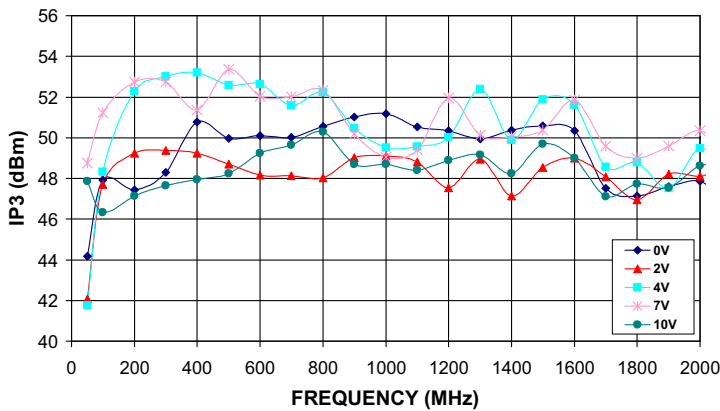
**RVA-2000V3+
INPUT RETURN LOSS Vs. FREQUENCY
OVER CONTROL VOLTAGES**



**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**

