

Broad Band Voltage Variable Attenuator

50Ω, 10 to 2500 MHz

**RVA-2500+
RVA-2500**

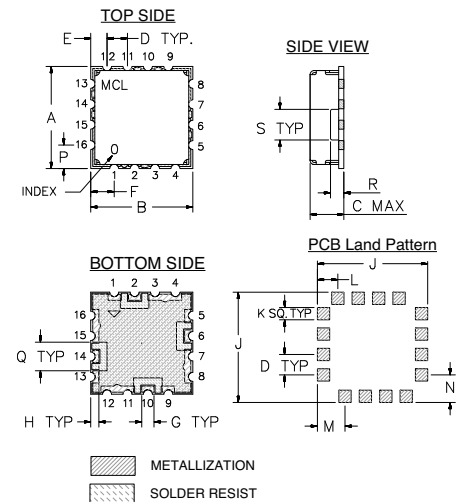
Maximum Ratings

Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 85°C
Absolute Max. Supply Voltage(V+)	12V
Absolute Max. Control Voltage(Vctrl)	20V
Absolute Max. RF Input Level	+20 dBm

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

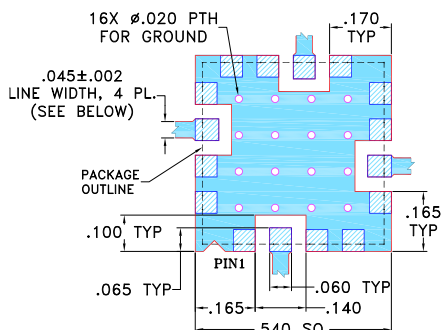
Outline Drawing



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)



NOTES:
1. 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
2. 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, 10-2500 MHz
- IP3, +43 dBm typ.
- 40 dB attenuation @ 1500 MHz
- Good VSWR at IN/OUT ports over attenuation range
- Minimal phase deviation over attenuation range
- No external bias and RF matching network required
- Shielded case



CASE STYLE: DV874
PRICE: \$ 9.95 ea. QTY (10-49)

Applications

- Power level control
- Feed forward amplifiers

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

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

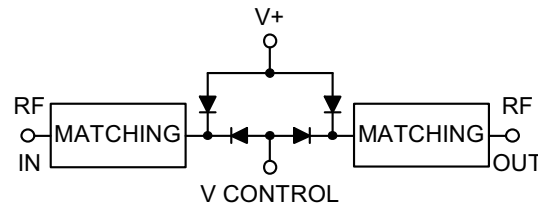
Electrical Specifications (T_{AMB} = 25°C)

FREQ. (MHz)		MIN. INSERTION LOSS, dB (+15V)		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.	Max.	Typ.	Min.	Max.			Typ.	Typ.		Max.
10 - 500		3.0	4.6	55	41	+20	0 - 17	30	43	20	+3 to +5	5
500 - 1500		3.3	5.0	40	30	+20	0 - 17	30	43	20	+3 to +5	5
1500 - 2500		4.0	6.2	37	25	+20	0 - 17	30	44	20	+3 to +5	5

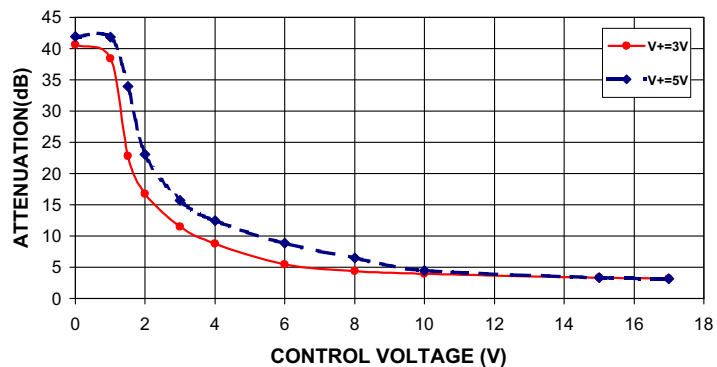
Notes:

Rise/Fall time: 14μSec / 25μSec Typ.
Switching Time, turn on/off: 14μSec / 25μSec Typ.
Improved R.Loss in/out performance can be achieved at certain frequencies by choosing a V+ between +3V to +5V

Equivalent Schematic



RVA-2500 TYPICAL ATTENUATION AT 1000MHz



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RF/IF MICROWAVE COMPONENTS

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EDR-5407/2
RVA-2500+
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page 1 of 3

