

Product Features

Application

- Pin diode based
- Voltage variable
- High Linearity
- SMD Type

- Repeater
- Base Station

• RF Sub-Systems



Package Type: HY-1

ELECTRICAL CHARACTERISTICS

Absolute Minimum and Maximum Ratings

PARAMETER	UNIT	MIN	MAX
Reference Voltage	VDC		+3V
RF Input Power	dBm		30
Storage Temperature	°C	-40	+125

Operating Ranges

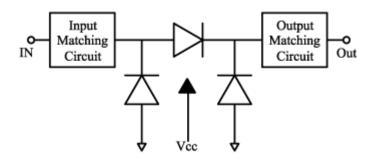
PARAMETER	UNIT	MIN	TYP	MAX
Operating Frequency	MHz	3000	-	4000
Reference Voltage	VDC	-	+3V	
Control Voltage	VDC	+1.2V		+10V

Electrical Specifications

(Ta=+25 °C, ∨cc=+3V, F=3500MHz)

PARAMETER	UNIT	MIN(1.2V)	TYP(4.5V)	MAX(10V)
Attenuation	dB	17	3.3	2.2
Input Return Loss	dB	-12	-16	-17
Output Return Loss	dB	-19	-17	-16
IIP3	dBm	46	44	45
Input P1dB	dBm		30	
Current	mA	0	10	28

Functional Diagram



Tel: 82-31-250-5011rfsales@rfhic.com

[•] All specifications may change without notice.

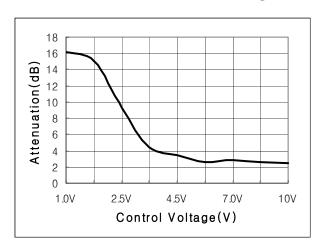
[•] Version 5.3



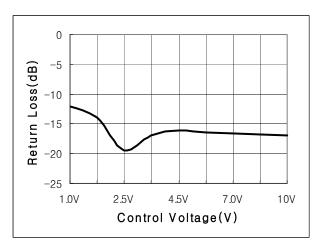
Typical Performance Data (Vcc=3V, f=3500MHz)

Control Voltage	1.2V	2.5V	4.5V	7.0V	10V
Attenuation(dB)	17	9.2	3.3	2.8	2.2
Return Loss(dB)	-12	-19	-16	-16	-17
IIP3 (dBm)	46	44	44	44	45
Current (mA)	0	4	10	18	28

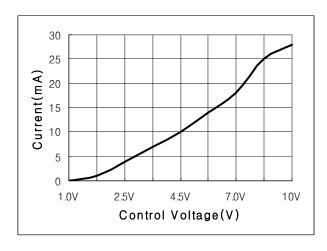
Attenuation vs. Control Voltage



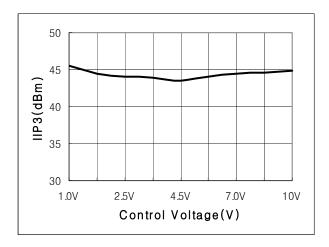
Return Loss vs. Control Voltage



Current vs. Control Voltage



IIP3 vs. Control Voltage



[•] Tel: 82-31-250-5011

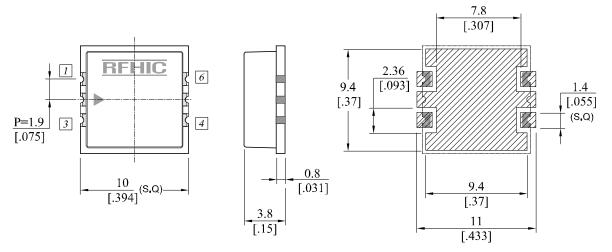
[•] Version 5.3

Variable attenuator VA103



Package Dimensions (Type: HY-46)





Pin No.	Function	Pin No.	Function
1	Input 1	4	Vcc+3V
2	Ground	5	Ground
3	Control	6	Output 1

Recommended Pattern

RFHIC Corporation (RFHIC) reserves the right to make changes to any products herein or to discontinue any product at any time without notice. RFHIC do not assume any liability for the suitability of its products for any particular purpose, and disclaims any and all liability, including without limitation consequential or incidental damages. The product specifications herein expressed have been carefully checked and are assumed to be reliable. However, RFHIC disclaims liability for inaccuracies and strongly recommends buyers to verify that the information they are using is current before placing purchase orders. RFHIC products are not intended for use in life support equipment or application where malfunction of the product can be expected to result in personal injury or death. Buyer uses or sells such products for any such unintended or unauthorized application, buyer shall indemnify, protect and hold RFHIC and its directors, officers, stockholders, employees, representatives and distributors harmless against any and all claims arising out of such use. RFHIC's liability under or arising out of damages, claims of whatsoever kind and nature which RFHIC products could cause shall be limited in amount to the net purchase price of the products sold to buyer by RFHIC.

[•] Tel: 82-31-250-5011