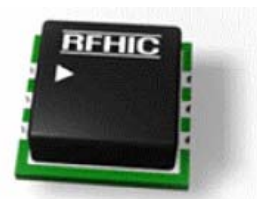


## Product Features

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

## Application

- Repeater
- RF Sub-Systems
- Base Station



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

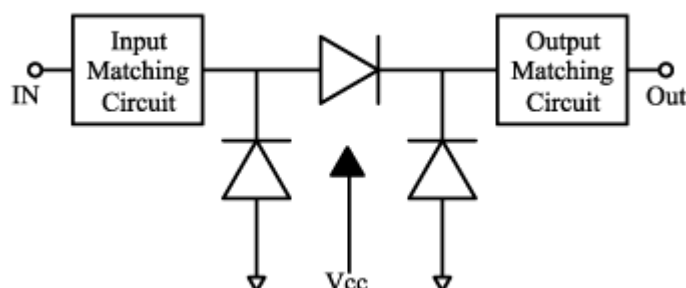
PARAMETER	UNIT	MIN	TYP	MAX
Operating Frequency	MHz	3000	-	4000
Reference Voltage	VDC	-	+3V	
Control Voltage	VDC	+1.2V		+10V

### Electrical Specifications

(Ta=+25°C, Vcc=+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

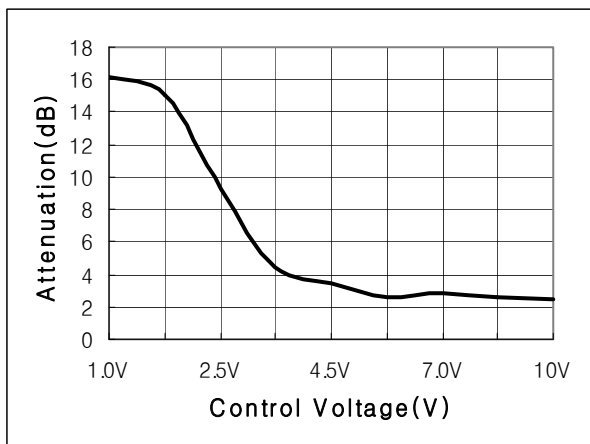
### Functional Diagram



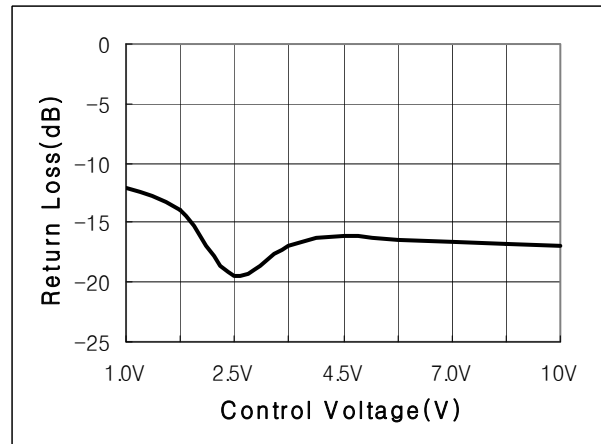
## Typical Performance Data (V<sub>cc</sub>=3V, f=3500MHz)

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

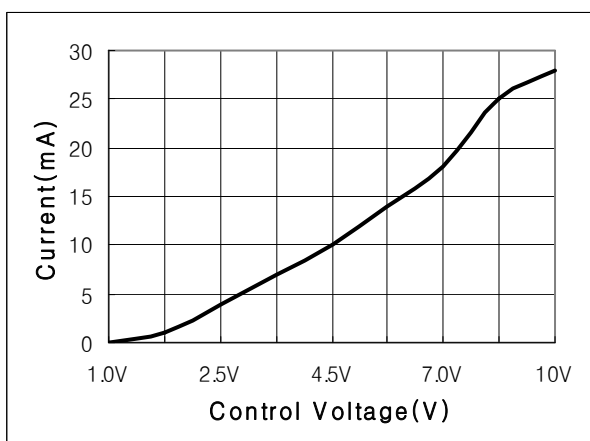
### Attenuation vs. Control Voltage



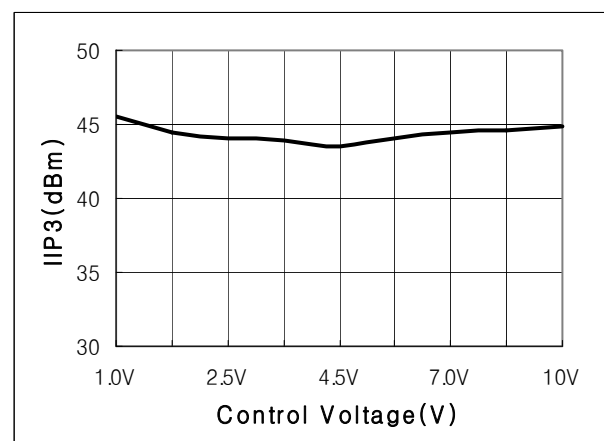
### Return Loss vs. Control Voltage



### Current vs. Control Voltage

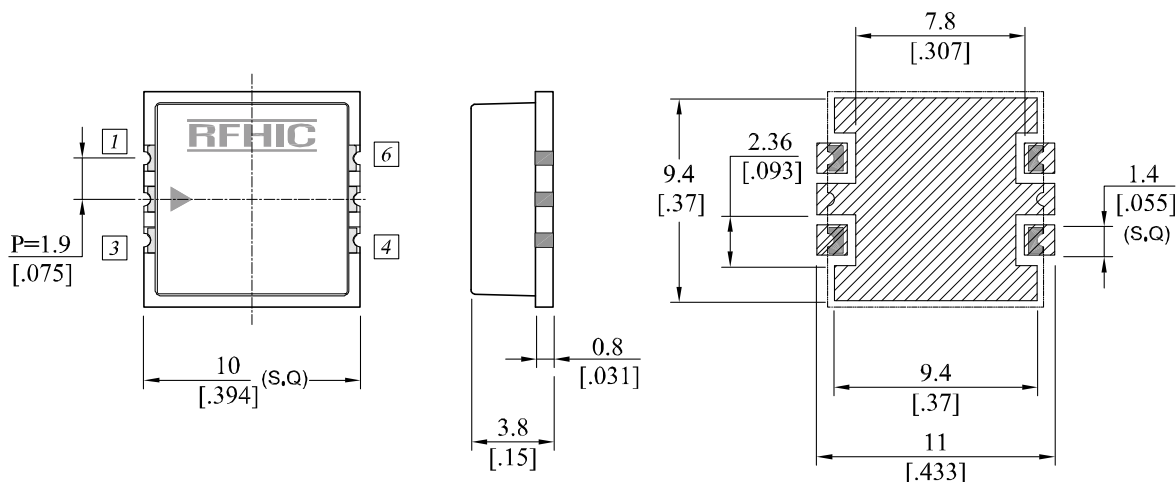


### IIP3 vs. Control Voltage



## Package Dimensions (Type : HY-46)

Unit : $\frac{\text{mm}}{\text{[inch]}}$	Tolerance : $\pm \frac{0.2}{.008}$
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Recommended Pattern

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

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