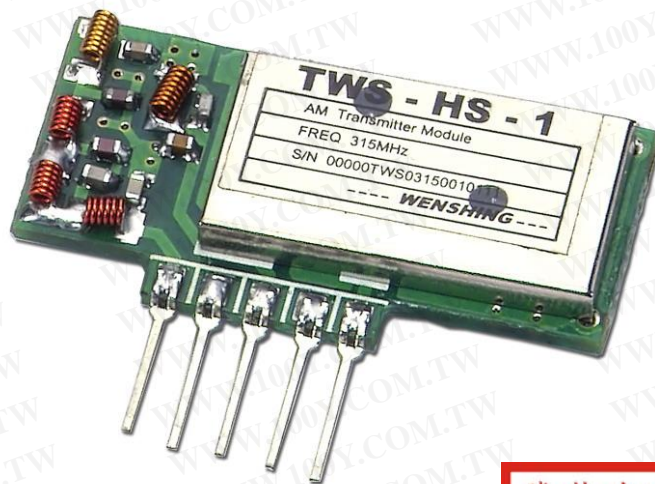


# TWS-HS series WENSHING®

V1.04

## Wireless High Power Transmitter Module



勝特力材料 886-3-5753170  
勝特力电子(上海) 86-21-54151736  
勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)

### ➤ Key Features :

- Output Power up to 0.5W
- Voltage Supply from 4.5V to 5.5V
- Transmitter Data Rate 8Kbps

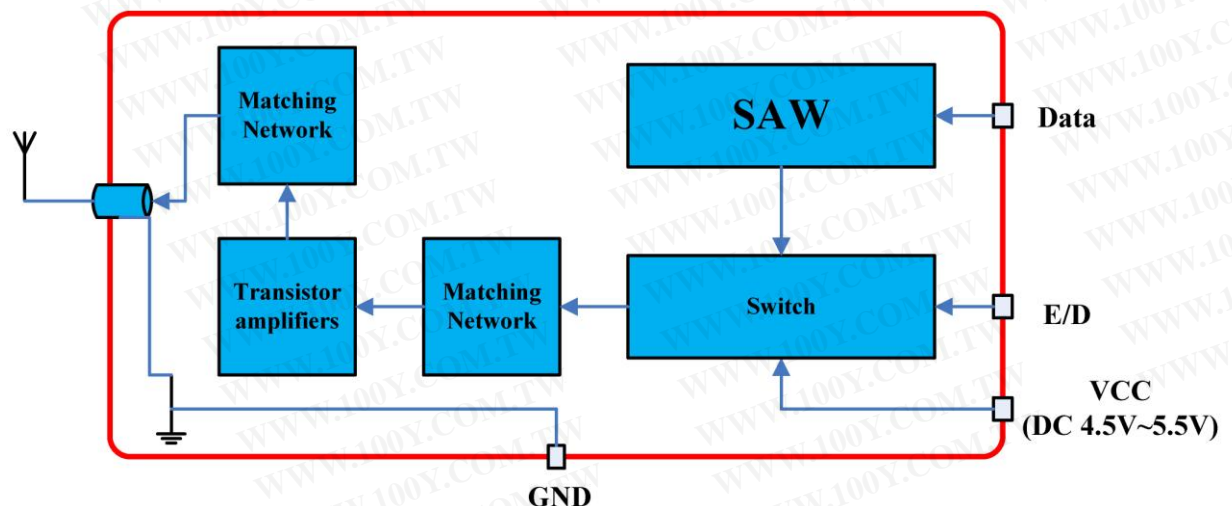
### ➤ Applications :

- Remote control aircraft
- Remote control alarm
- Wireless toy
- Long-distance switch
- Long-distance walkie-talkie

## ➤ Characteristics :

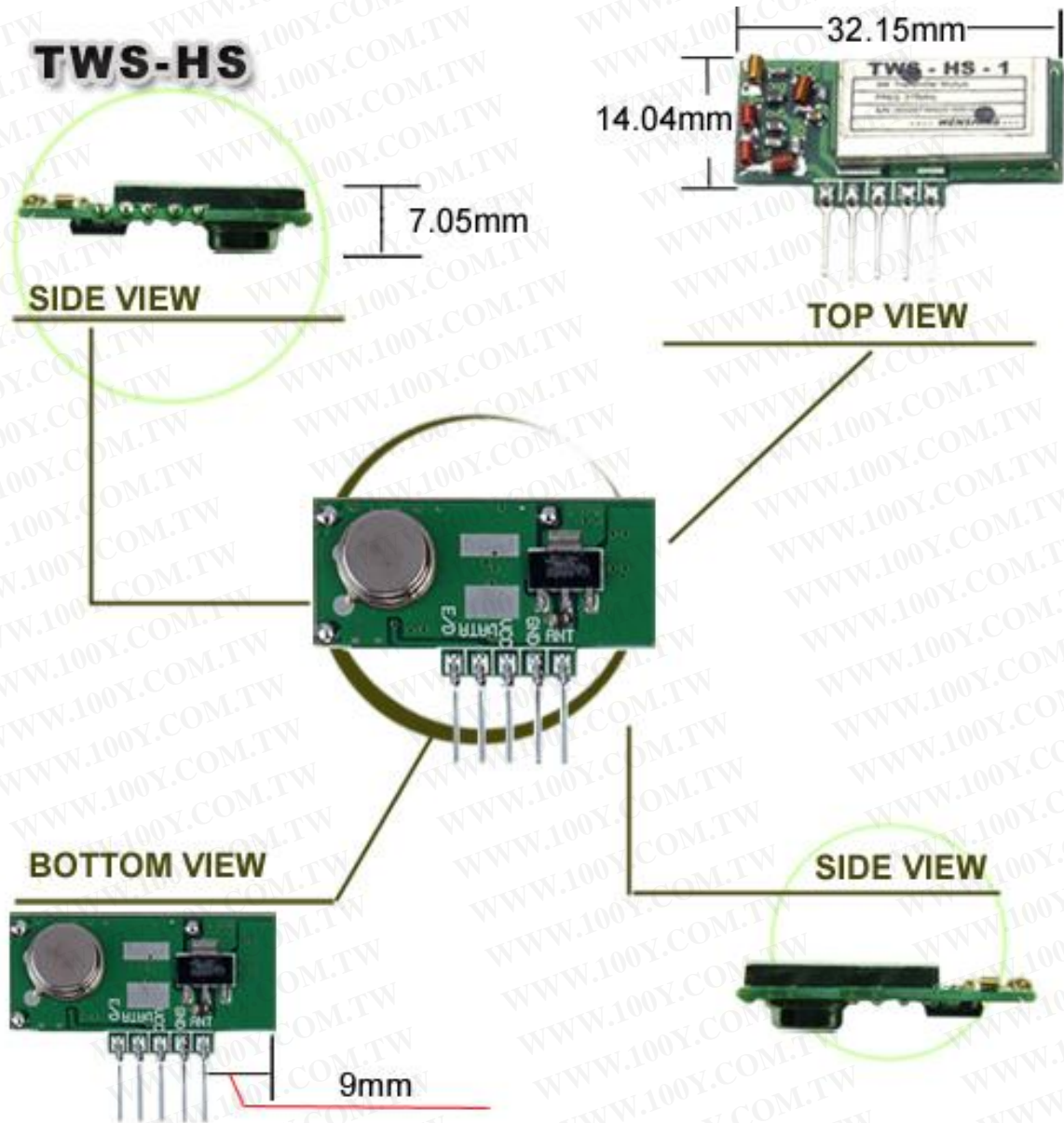
Parameter	Min	Type	Max	Unit	Condition
<b>Operating Conditions</b>					
Operating temperature range	-20		+85	°C	
Soldering temperature			+230	°C	10sec
Operating supply voltage	4.5		5.5	V	
<b>Current Consumption</b>					
Tx mode			270	mA	0.5W
Standby mode			33	mA	E/D=H
<b>TWS-HS Series for Frequency</b>					
TWS-HS-1	314.9	315	315.1	MHz	ASK
TWS-HS-2	433.82	433.92	434.02	MHz	ASK
TWS-HS-3	868.25	868.35	868.45	MHz	ASK
<b>RF Characteristics</b>					
Span range	-100		+100	KHz	
Data rate			8	Kbps	ASK
Output power			27	dBm	0.5W
Turn On/Off time			300	us	
Modulation		ASK			
<b>Other</b>					
Module size	32.15 x 14.04 x 7.05			mm	
Pin size	0.5 x 6			mm	

## ➤ Block Diagram:



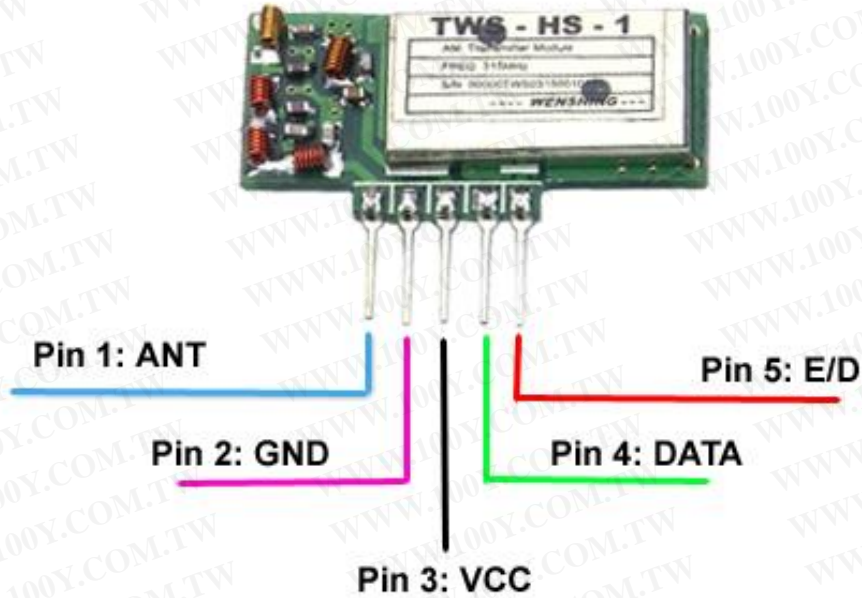
➤ **View:**

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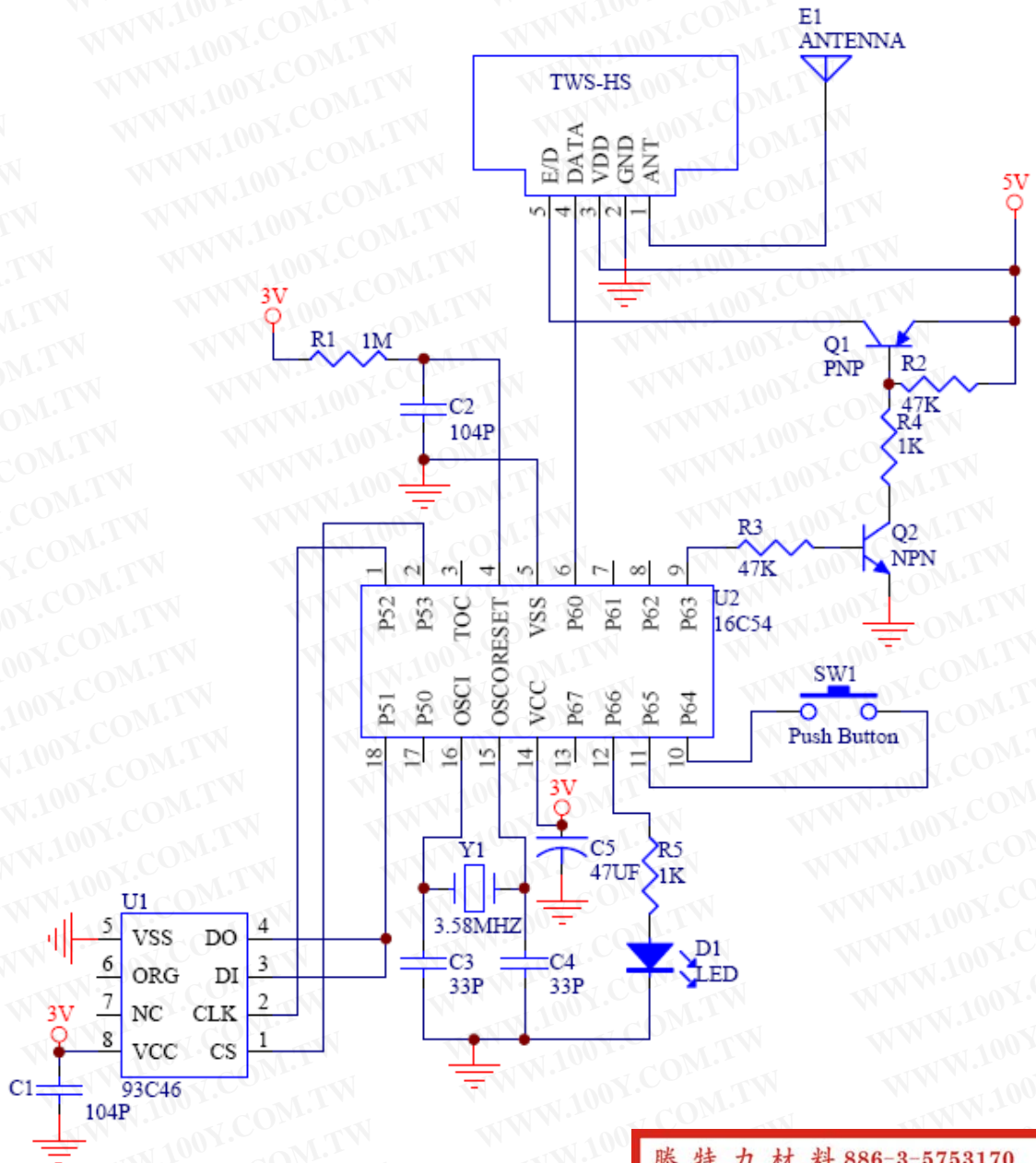
## ➤ Pin Assignment:

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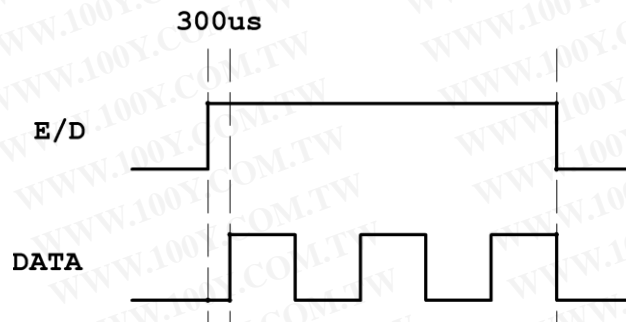


Pin	Function	I/O	Description
1	ANT	ANT	Antenna Interface
2	GND	G	Power Negative
3	VCC	P	Power Cathode
4	DATA	I	Data input
5	E/D	I	Enable and Disable Control

## ➤ Application Circuit:



## ➤ Timing diagram:



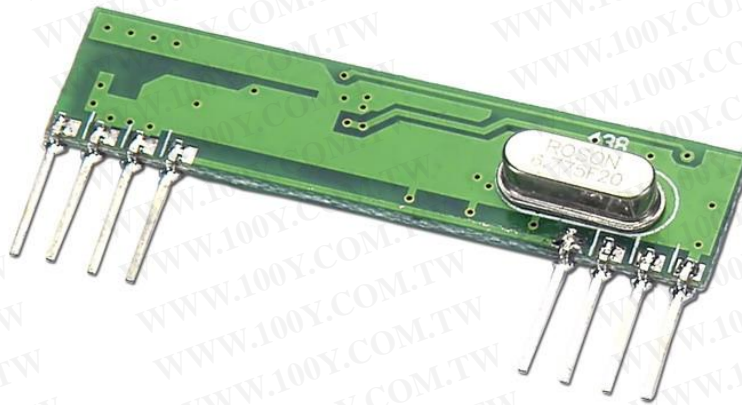
勝特力材料 886-3-5753170  
 勝特力电子(上海) 86-21-54151736  
 勝特力电子(深圳) 86-755-83298787  
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# RWS-438-6

WENSHING®

V1.02

## Wireless Narrow Band Receiver Module Systems (RF ASK)



### ➤ Specification:

● 433.92MHz ISM	● 303.875~433.92 MHz Operation
● Hi Sensitivity: -114dBm (512bps)	● Single 4.8V to 5.5V Supply
● UHF Wireless Data Receiver	● Automatic Meter Reading
● Wireless Security Systems	● Remote Metering
● Home Automation	● Remote Control Systems

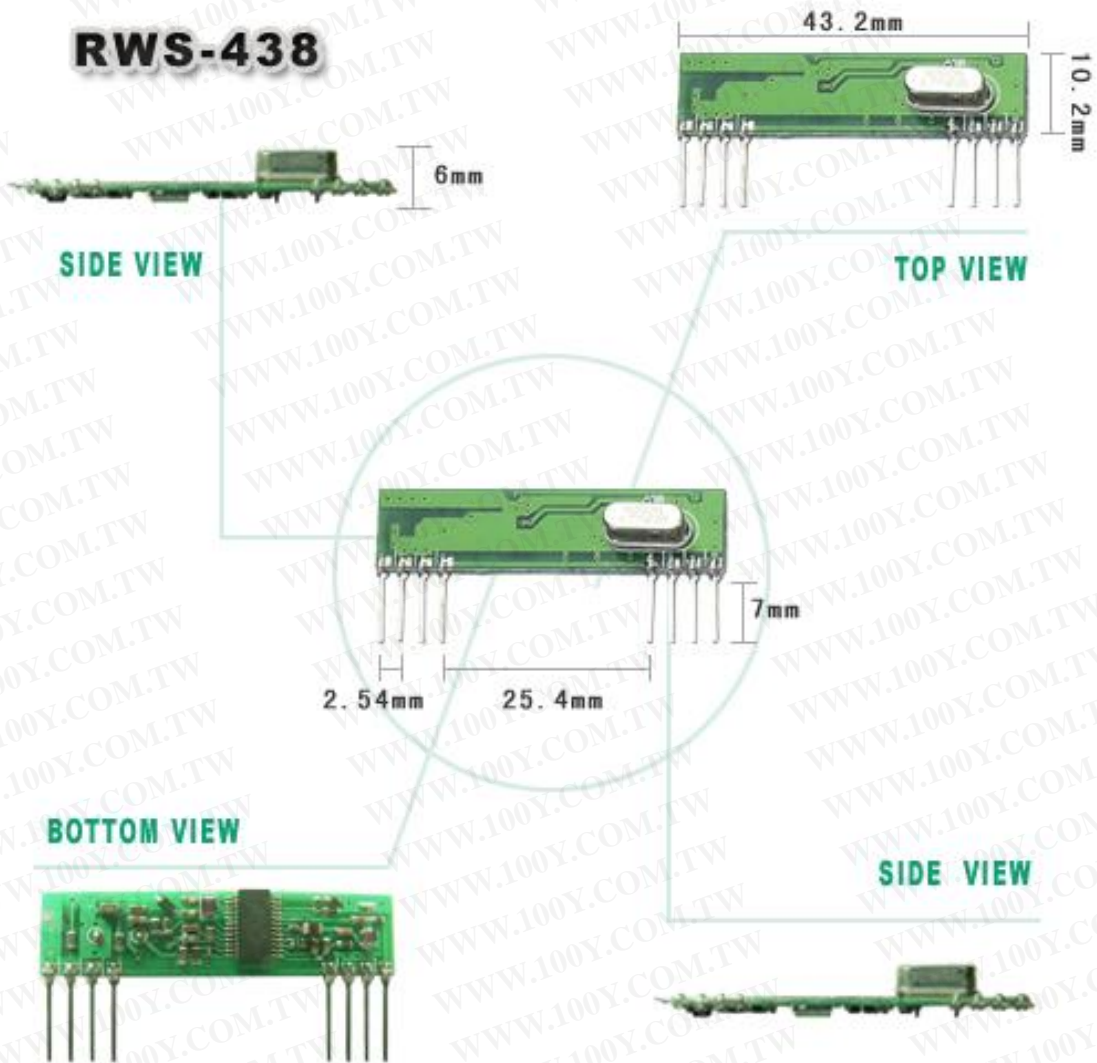
### ➤ RF Receive Section:

Parameter	Specification			Unit
	Min	Typ	Max	
Frequency Range	433.42	433.92	434.42	MHz
Transmit Data Rate	0.05		9.6	Kbps
Sensitivity	-108	-110	-114	dBm
Current Consumption	2.7		3	mA
Data Rate	0.2		9.6	Kbps
Operating Ambient Temperature Range	-40~+80			°C



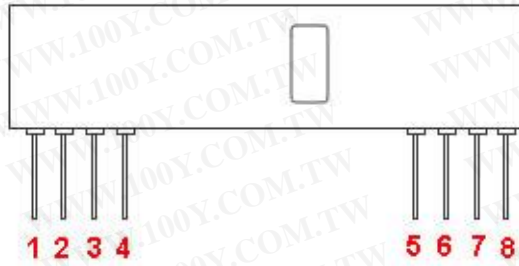
**View:**

# RWS-438



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[Http://www.100y.com.tw](http://www.100y.com.tw)

## ➤ Pin Assignment:



Pin 1: ANT  
 Pin 2: RF GND  
 Pin 3: RF GND  
 Pin 4: VCC  
 Pin 5: VCC  
 Pin 6: DATA  
 Pin 7: DATA  
 Pin 8: DGND

Modulation: AM  
 Supply Voltage: 5V DC

Pin	Function	Description
1	ANT	TO ANTENNA
2	RF GND	TO ANTENNA GND
3	RF GND	TO ANTENNA GND
4	VCC	POWER IN
5	VCC	POWER IN
6	DATA	DATA OUT TO MCU OR DECODER
7	DATA	DATA OUT TO MCU OR DECODER
8	DGND	POWER GND

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模組配對例:

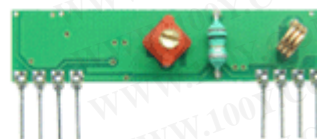
發送	接收	距離
TWS-HS-2	RWS-371-6(433.92MHz)	500M
TWS-HS-2	RWS-374-6(433.92MHz)	500M
TWS-HS-2	RWS-375-6(433.92MHz)	500M



TWS-HS Transmitter



Partnership



RWS-371 Receiver



TWS-HS Transmitter



Partnership



RWS-374 Receiver



TWS-HS Transmitter



Partnership



RWS-375 Receiver

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 勝特力电子(上海) 86-21-54151736  
 勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)