
Wireless Hi Power Transmitter Module (RF ASK)

**Version History**

Version	Date	Changes
V1.01	SEP. 12, 2013	1 st . Edition

➤Application

● Wireless Data Transmission	● Wireless Game Pad
● Remote Control	● Wireless Toys
● Car Key	● Home Automation
● AMR- Automatic Meter Reading	● Remote Keyless Entry

➤Absolute Maximum Rating

Rating	Value	Unit
Power Supply and All Input/ Output Pins	-0.3~+12	V
Non-Operating Case Temperature	-20~+85	°C
Soldering Temperature(10 seconds)	230	°C

Pin Assignment

Pin	Function
1	GND
2	Data in
3	Vcc
4	ANT



➤ **Model : TWS-ES-6**

- Frequency: 433.92MHz
- Modulate Mode: ASK
- Circuit Shape: SAW
- Data Rate: 8Kbps
- Supply Voltage: 1.5~12V
- Electric Current: 23mA(5V) ; 40mA(9V) ; 53mA(12V)
- Output Power: 10dBm(5V) ; 14.5dBm(9V) ; 20dBm(12V)
- High sensitivity is designed.

➤ **Electrical Characteristic**

Characteristic	Sym.	Min.	Typ.	Max.	Unit
Operating Frequency ($\pm 250\text{KHz}$)	Vcc	433.62	433.92	434.22	MHz
Data Rate	ASK			8	Kbps
Transmitter performance (OOK@2.4Kbps)					
Peak Input Current,12Vdc Supply	ITP			53	mA
Peak Output Power (20dBm)	PO		10	40	mW
Turn On/ Turn Off Time	T ON T OFF			40	US
Power Supply Voltage Range	Vcc	1.5		12	Vdc
Operating Ambient Temperature	TA	-20		+85	°C
Tx Antenna Out (3V) +2.4dBm	Vcc				mA

➤ **Model : TWS-ES-3**

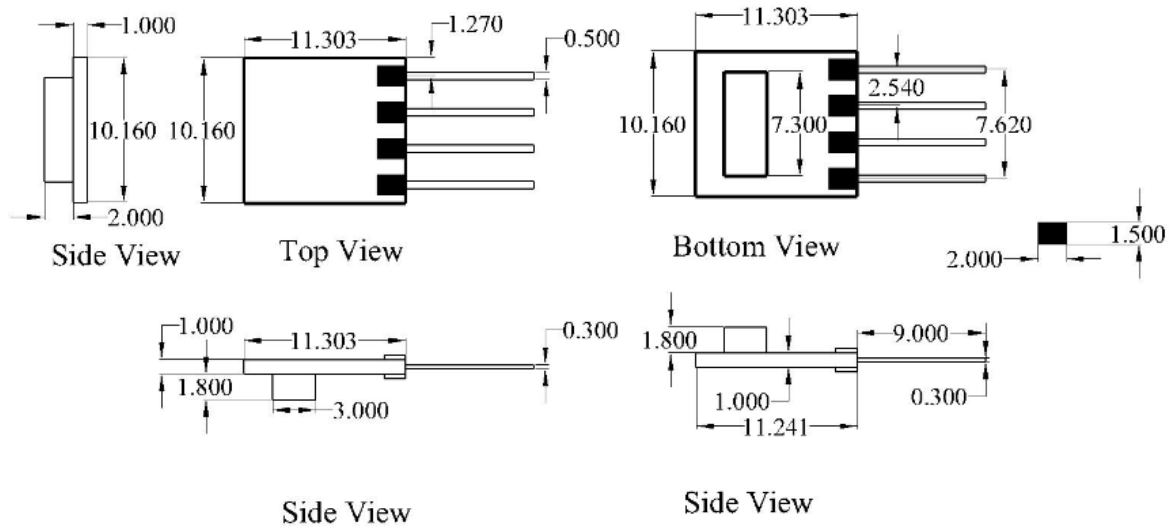
- Frequency: 315MHz
- Modulate Mode: ASK
- Circuit Shape: SAW
- Data Rate: 8Kbps
- Supply Voltage: 1.5~12V
- Electric Current: 23mA(5V) ; 40mA(9V) ; 53mA(12V)
- Output Power: 10dBm(5V) ; 14.5dBm(9V) ; 20dBm(12V)

➤ **Electrical Characteristic**

Characteristic	Sym.	Min.	Typ.	Max.	Unit
Operating Frequency ($\pm 250\text{KHz}$)	Vcc	314.70	315.00	315.30	MHz
Data Rate	ASK			8	Kbps
Transmitter Performance(OOK@2.4Kbps)					
Peak Input Current,12Vdc Supply	ITP			53	mA
Peak Output Power (20dBm)	PO		10	40	mW
Turn On/ Turn Off Time	T ON T OFF			40	US
Power Supply Voltage Range	Vcc	1.5		12	Vdc
Operating Ambient Temperature	TA	-20		+85	°C
Tx Antenna Out (3V) +2.4dBm	Vcc				mA

➤Dimension

(unit : mm)



Demo Circuit

DEMO Operating voltage 2V~6V

