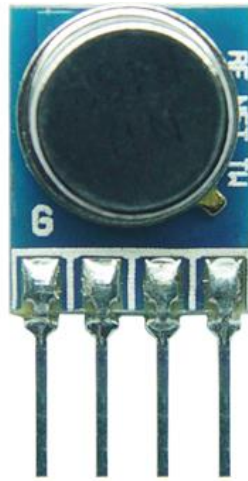

Wireless Hi Power Transmitter Module (RF ASK)

**Version History**

| Version | Date | Changes |
|---------|---------------|---------------------------|
| V1.01 | May. 20, 2009 | 1 st . Edition |
| V1.02 | Mar. 03, 2011 | 2 st . Edition |

Model : TWS-DS-2

- Frequency Range: 310 MHz
- Modulate Mode: ASK
- Circuit Shape: SAW
- Data Rate: 8Kbps
- Supply Voltage: 1.5~12V
- Electric Current: 23mA (5V) ; 40mA (9V) ; 53mA (12V)
- Power: 10dBm (5V) ; 14.5dBm (9V) ; 20dBm (12V)
- Working temperature: -20~+85°C
- Solder temperature: 230°C(10 seconds).
- High sensitivity is designed.

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

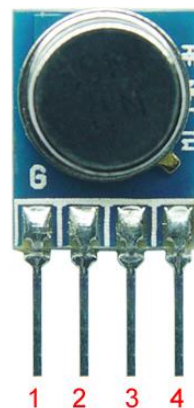
| Rating | Value | Unit |
|---|------------|------|
| Power Supply and All Input/ Output Pins | -0.3~+12.0 | V |
| Non-Operating Case Temperature | -20~+85 | °C |
| Soldering Temperature(10 seconds) | 230 | °C |

Electrical Characteristic

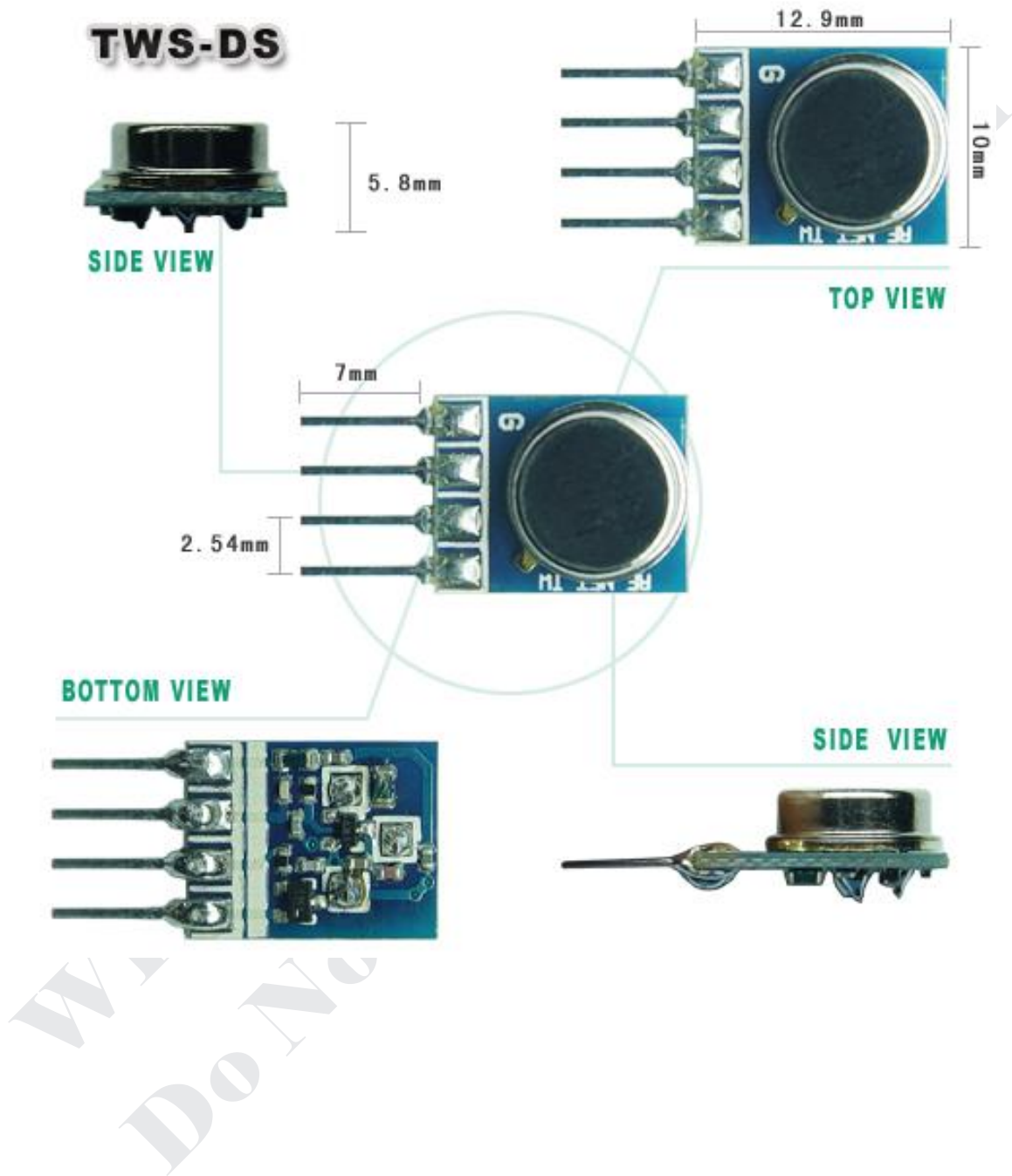
| Characteristic | Sym | Min | Type | Max | Unit |
|--|----------------|--------|--------|--------|------|
| Operating Frequency ($\pm 250\text{KHz}$) | Vcc | 309.75 | 310.00 | 310.25 | MHz |
| Data Rate | ASK | | | 8 | Kbps |
| Transmitter Performance(OOK@2.4Kbps) | | | | | |
| Peak Input Current,12Vdc 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 |

Pin Assignment

| Pin | Function |
|-----|----------|
| 1 | GND |
| 2 | Data in |
| 3 | Vcc |
| 4 | ANT |



Size



Demo Circuit

DEMO Operating voltage 2V~6V

