

GENERAL DESCRIPTION

RhombusMF6200ST mini-reader unit is designed for reading the Serial Number of the Mifare I compatible IC cards and is a major component in RFID (Radio Frequency Identification) reader system. It can be applied in office/home security, personal identification, access control, anti-forgery and production control systems etc.

FEATURES

- External balance driven antenna supported;
- Maximum effective distance up to 80mm;
- Less than 200ms decoding time;
- Low power dissipation with single power supply;
- RS232 TTL level serial interface;
- Support Mifare I compatible IC cards;

CHARACTERISTICS

- Absolute Maximum Ratings

| ITEM | SYMBOL | VALUE | UNIT |
|-----------------|------------------|----------|------|
| Power Supply | VCC | 6 | V |
| Operating Temp. | T _{OPR} | 0~+70 | °C |
| Storage Temp. | T _{STR} | -55~+125 | °C |

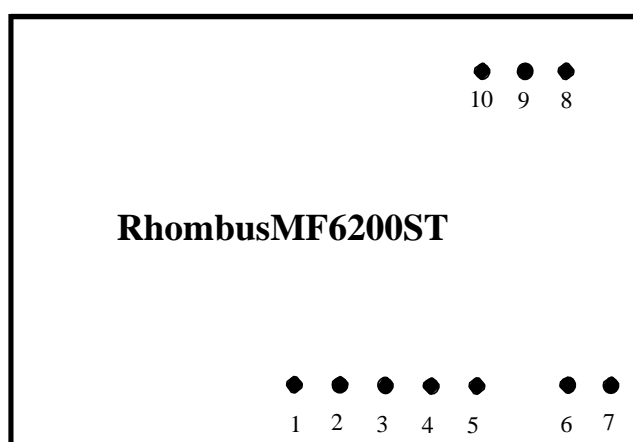
- Electrical and Mechanical Specification

Under T_A=25℃, VCC=+5V unless specified

| ITEM | SYMBOL | MIN | TYP | MAX | UNIT |
|---------------------|------------------|-----|-------|-----|------|
| Power Supply | VCC | 4.5 | 5 | 5.5 | V |
| Current Supply | I _C | | 60 | 100 | mA |
| Operation Freq. | F _{REQ} | | 13.56 | | MHZ |
| Effective Distance* | DIS | 0 | 50 | 80 | mm |
| Decoding Time | T _{DEC} | | 120 | 200 | ms |

- Effective Distance depends on tags, antenna and operating environment.

INTERFACE DESCRIPTION



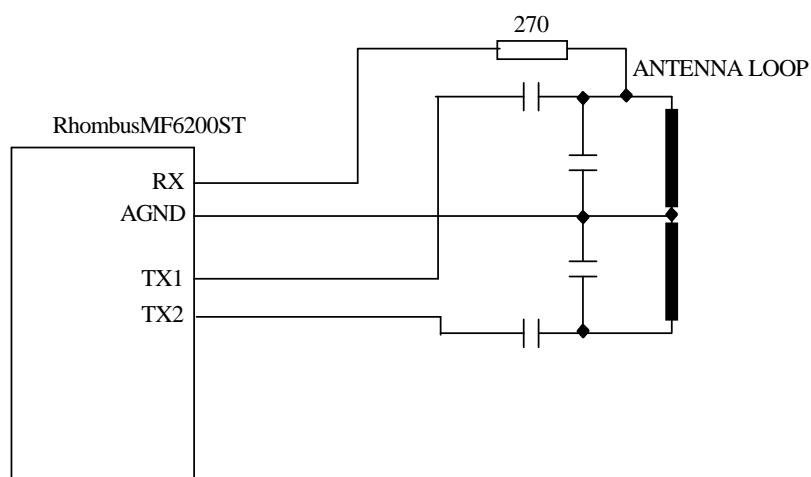
Bottom View

| PIN No. | SYMBOL | DESCRIPTION |
|---------|----------|--|
| 1 | TXD | Serial data output |
| 2 | RESERVED | RESERVED |
| 3 | HOLD | Hold output |
| 4 | TX1 | Antenna Driver |
| 5 | TX2 | Antenna Driver |
| 6 | AGND | Analog Ground. Internally connected to Digital Ground. |
| 7 | RX | Signal input |
| 8 | DGND | Digital Ground |
| 9 | DVCC | +5V power |
| 10 | NRST | Low level effective external Reset.* |

- Normally keep unconnected

APPLICATION INFORMATION

The following is a typical external antenna circuit for RhombusMF6200ST:



Note: Rhombus' products must work with linear regulated power supply, and other kinds of power supply are prohibited.