CTI-TX1A100 RF Transmitter Module

CTI-TX1A100 ASK RF Transmitter Module is designed for wireless applications.

- Bit rate 1 kbps (K bits per second)
- Small footprint 2.4 cm²
- Stable working frequency in its class with SAW technology (+/-75 Khz)
- Distance up to 1000 feet
- Wide range of working power supply voltage: 3.0 12.0 VDC



- Wireless entry/access control
- Wireless sensory network
- Wireless consumer/appliances applications
- Industrial process control
- Intelligent home applications
- Security applications
- Automobile applications

| | Symbol | Test | Parameter | | | |
|--------------------------|----------------|-----------------|--------------------------|-------------------------|------------------------|--|
| | | Condition | Min | Typical | Max | |
| Frequency | F _c | | 315 MHz | 430.5 MHz | 433.92 MHz | |
| Modulation | ASK | | | | | |
| Transmission Power | | 9V/50Ω | | 13 dBm | | |
| Modulation Frequency | | | | 2.4 kHz | | |
| Frequency drafting range | ΔF_c | | | +/- 75 KHz | | |
| Current | I_{RC} | 12V 6V 3V | | 10 mA 6 mA 3.2 mA | 15 mA | |
| Voltage | V_{CC} | | 3 V | | 12 V | |
| Temperature (Operating) | $T_{\rm C}$ | | -40 C (Storage -60 C) | | 85 C (Storage 125C) | |
| Transmission bit rate | | | | 1 Kbps | | |

Table 1. Electrical Characteristics

| | Pin As | signment |
|---------|--------------|-------------------|
| 1 | | 1.3 mm |
| | -TX1A-100 | |
| u | | |
| 16.2 mm | | 4 3 2 1 Vcc |
| 16.2 | [4 3 2 1] | ANT |
| | | GND |
| | 2.54 mm | |
| | 2.5 (111111 | $C_1=0.1$ uF Data |
| | | No. |

| Pin Number | Label | |
|------------|----------|------------|
| 1 | V_{CC} | Power |
| 2 | DATA | Data Input |
| 3 | GND | Ground |
| 4 | ANT | Antenna |

Table 2. Pin Assignment

