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| --- | | |  |  | | --- | --- | |  |  | | |  |  | | --- | --- | | http://www.chinareader.cn/news/oledit/UploadFile/200912/2009129205027385.jpg | | | **CR001B-K4 SERIES Proximity Reader Module** DATA SHEET(May 8, 2005) | | | Low Cost Short-Range Proximity Reader Modules | | | **Operational and Physical Characteristics** | | |  | |  |  |  | | --- | --- | --- | | **Parameters** | **Description** | **Photo** | | Read Range | 8-12cm |  | | Dimensions | 26.5mm(L)x16.5mm(H)x6.9mm(W) | | Frequency | 125kHz | | Card Format | EM 4001 or compatible | | Encoding | Manchester 64-bit, modules 64 | | Power Requirement | 3VDC @ 30mA nominal | | Voltage Supply Range | +2.7V through +3.6VDC | | | **Pin Description & Output Data Formats** | | |  | |  |  |  |  | | --- | --- | --- | --- | | **Pin No.** | **Description** | **CR001B-K4-2 (ASCII)** | **CR001B-K4-W2(Wiegand26)** | | Pin 1 | To External Antenna | Antenna | Antenna | | Pin 2 | To External Antenna(L:680uH) | Antenna | Antenna | | Pin 3 | Con | Strap to Vcc(High Volts) | Strap to Vcc(High Volts) | | Pin 4 | BEEPER/LED Drive | 2.7kHz Logic | 2.7kHz Logic | | Pin 5 | DATA0 | CMOS Data Output(TX) | Zero Output | | Pin 6 | DATA1 | TTL Data（inverted）Output | One Output | | Pin 7 | CS | CS | HOLD Output | | Pin 8 | Zero Volts Or Ground | GND 0V | GND 0V | | Pin 9 | DC Voltage Supply(Vcc) | +2.7V through 3.6VDC | +2.7V through 3.6VDC | | | **DATA FORMATS** | | |  | CR001B-K4-2 Output Data Structure – ASCII(RS232.TTL)9600,N,8,1   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | STX (02H) | DATA(10 ASCII) | CHECK SUM (2 ASCII) | CR | LF | ETX (03H) |   [The 1byte (2 ASCII charaters) Check sum is the “Exclusive OR” of the 5 hex bytes(10 ASCII) Data characters.] For Example:DATA : 62H E3H 08H 6CH EDH, Check Sum: (62H) XOR (E3H) XOR (08H) XOR (6CH) XOR (EDH)=08H, Output: 0X02 0X36 0X32 0X45 0X33 0X30 0X38 0X36 0X43 0X45 0X440X0D 0X0A 0X03 | | CR001B-K4-W2 Output Data Structure–Wiegand 26 bit | | |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | | P(1) | E | E | E | E | E | E | E | E | E | E | E | E | O | O | O | O | O | O | O | O | O | O | O | O | P(2) | | EVEN Parity(E) | | | | | | | | | | | | | ODD Parity(O) | | | | | | | | | | | | | | | P(1):Parity Start Bit, 2-13 bit EVEN Parity bit 　 P(2):Parity Stop Bit, 14-26 bit ODD Parity bit | | | **Wiegand Output Structure** | | | http://www.chinareader.cn/k/news/oledit/UploadFile/200712/200712308186544.gif | | |  | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | SYMBOL | Parameter | Limits Min. | Limits Max. | Type | UNITS | | THD | Hold Start data read delay time | 0.5 | 2 | 0.55 | mS | | TDW | Data Pulse width time | 20 | 100 | 50 | μS | | TIW | Data Pulse interval time | 0.2 | 4 | 1.1 | mS | | TSN | Data Send delay time | 5 | - | 80 | mS | | TCS | Hold and Start read time | 40 | 120 | 100 | mS | | TA | Total scan time | 100 | - | - | mS | | | |  | |  | | |