imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

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CU209-TW200A

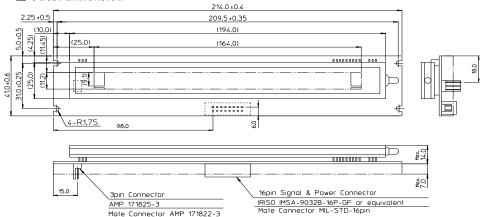
SIMPLIFIED DATASHEET

Noritake **itron**

Features

20 character x 1 line display character module. Wide illuminating surface for enhanced visibility.

Outer dimension





Click here to go to request form.

():Refarnce Only UNIT:mm

Specifications

| Electrical Ratings | | | | | | |
|----------------------------|--------|------|------|------|------|-----------|
| Parameter | Symbol | Min. | Тур. | Max. | Unit | Condition |
| Power supply voltage | VCC | 4.75 | 5.00 | 5.25 | VDC | - |
| | | | | | | |
| | | | | | | |
| Electrical Characteristics | | | | | | |
| Parameter | Symbol | Min. | Тур. | Max. | Unit | Condition |

| Input Voltage | | | | | | |
|----------------------|-----|---------|-----|--------|------|-------------|
| Н | VIH | 0.8VCC | - | VCC | VDC | Vcc=5.0V |
| L | VIL | 0 | - | 0.3VCC | VDO | TA=25℃ |
| Output Voltage | | | | | | |
| Н | VOH | VCC-1.5 | - | - | | IOH=-5mA |
| L | VOL | - | - | 1.5 | | IOL=5mA |
| Power Supply Current | lcc | - | 360 | 470 | mADC | All dots ON |

Optical Characteristics

| Parameter | |
|-----------------------|----------------------------|
| Luminance | 685 cd/m ² Min. |
| Color of illumination | Green (Blue-Green) |

Environmental Conditions

| Parameter | |
|---------------------------|--|
| Operating Temperature | -40 ~ +85 degrees celsius |
| Storage Temperature | -40 ~ +85 degrees celsius |
| Operating Humidity | 20 ~ 80% R.H. (non-condensing) |
| Vibration (Non operation) | 10-55-10Hz, all amplitude 1mm, 30 minutes, X-Y-Z |
| Shock (non-operating) | 980m/s ² (100G) 9ms X-Y-Z, 3 times each direction |
| | |

Physical Specifications

Parameter Number of Char. Built-in Fonts Character Format Display Area Character Size Character Pitch

20 (20 characters x 1 line) ANK, International Font 5 x 7 dot matrix & Under line 164.0 x 11.2 mm (X x Y) 6.3 x 11.2 mm (X x Y) 8.3 mm

Interface

Parallel, Asynchronous Serial (CMOS)

Pin Assignment (Parallel / Serial)

| Pin No | Signal | Pin No | Signal |
|--------|--------|--------|--------|
| 1 | D7 | 2 | D6 |
| 3 | D5 | 4 | D4 |
| 5 | D3 | 6 | D2 |
| 7 | D1 | 8 | D0 |
| 9 | WR | 10 | CS |
| 11 | SIN/TO | 12 | BUSY |
| 13 | GND | 14 | GND |
| 15 | VCC | 16 | VCC |

| (Seria |) | |
|--------|--------|---------------------|
| Pin No | Signal | Baud Rate Setting |
| 1 | VCC | 19200bps* |
| 2 | SIN/T0 | 9600bps |
| 3 | GND | 4800bps |
| | | 2400bps |
| | | 1200bps |
| | | 600bps |
| | | (*:factory default) |

Functions

Parameter Auto initialized **Command Control** Blink speed control Flicker less Mode / Quick Write Mode etc.

