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# LCD2004 Module User Guid

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## Chapter 1. 2004 LCD Module Blue Characters White Backlight HD44780

### 1.1 Characters

Display Content: 20CHAR x 4ROW

Char. Dots: 5 x 8

Driving Mode: 1/16D

Available Types:

STN

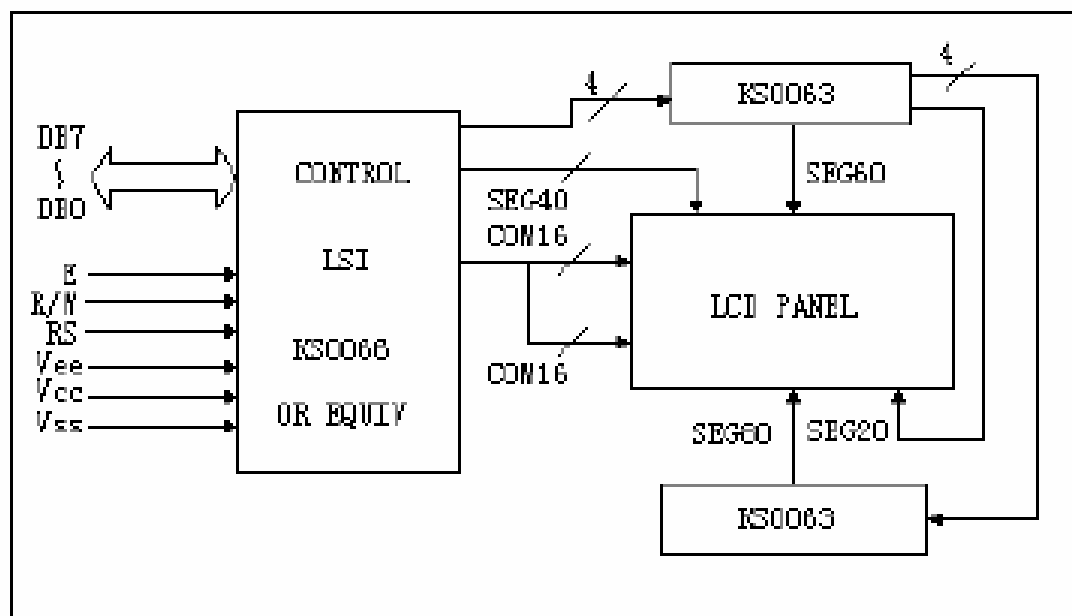
Reflective

### 1.2 Parameter

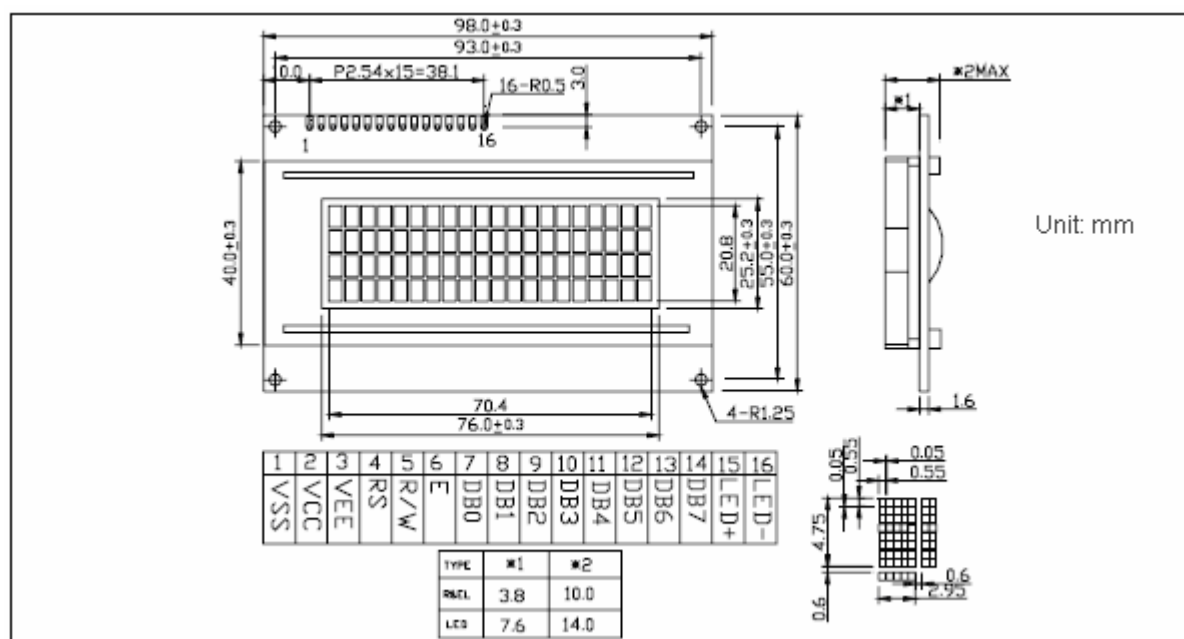
( $V_{DD}=5.0V\pm10\%$ ,  $V_{SS}=0V$ ,  $T_a=25^{\circ}C$ )

Parameter	Symbol	Testing Criteria	Standard Values			Unit
			Min.	Typ.	Max	
Supply voltage	$V_{DD}-V_{SS}$	-	4.5	5.0	5.5	V
Input high voltage	$V_{IH}$	-	2.2	-	$V_{DD}$	V
Input low voltage	$V_{IL}$	-	-0.3	-	0.6	V
Output high voltage	$V_{OH}$	$-I_{OH}=02mA$	2.4	-	-	V
Output low voltage	$V_{OL}$	$I_{OL}=1.2mA$	-	-	0.4	V
Operating current	$I_{DD}$	$V_{DD}=5.0V$	-	2.0	5.0	mA

### 1.3 Application Circuit



#### 1.4 Dimension/ Display Content



Pin configuration

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
V <sub>SS</sub>	V <sub>CC</sub>	V <sub>EE</sub>	RS	R/W	E	DB0	DB1	DB2	DB3	DB4	DB5	DB6	DB7	LED+	LED-