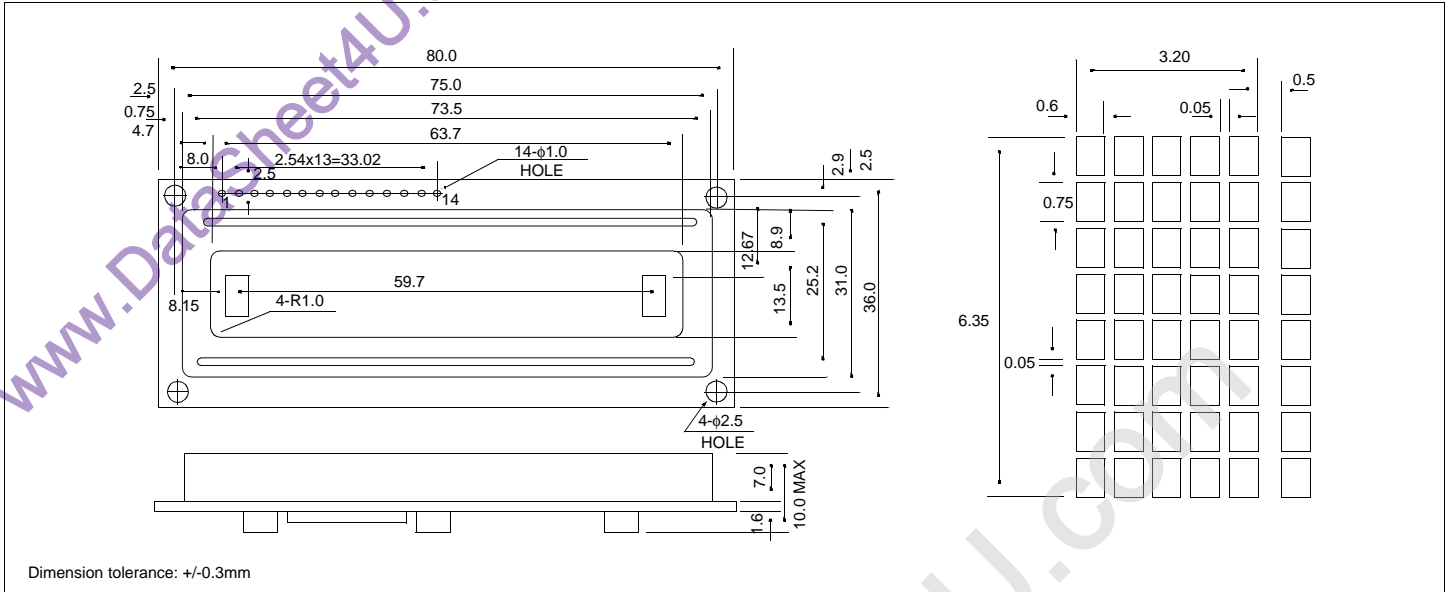


**Dimensional Drawing**

16 Character x 1 Line, Connector on Top



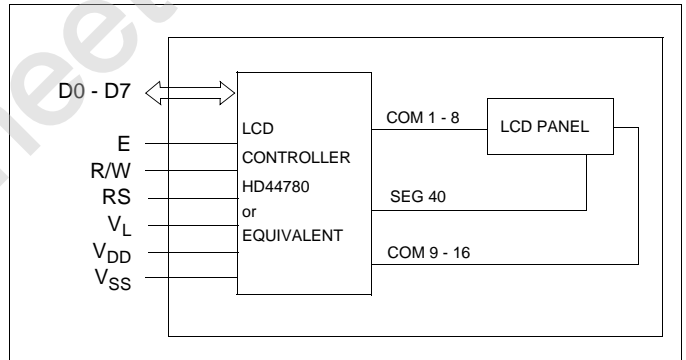
**Features**

Character Format .....5x7 Dots with Cursor  
 Backlight.....EL Optional  
 Options..TN/Gray STN/Yellow STN, 12 o'Clock/6 o'Clock View  
 Normal/Extended Temperature  
 Normal/Negative Displays

**Physical Data**

Module Size.....80.0W x 36.0H x 10.0T mm  
 Viewing Area Size.....63.7W x 13.5H mm  
 Weight.....25g

**Block Diagram**



**Absolute Maximum Ratings**

PARAMETER	SYMBOL	MIN	MAX	UNIT
SUPPLY VOLTAGE	$V_{DD}-V_{SS}$	0	7.0	V
SUPPLY VOLTAGE FOR LCD	$V_{DD}-V_L$	0	13.5	V
INPUT VOLTAGE	$V_{IN}$	$V_{SS}$	$V_{DD}$	V
OPERATING TEMPERATURE	$T_{OP}$	0	50	°C
STORAGE TEMPERATURE	$T_{STG}$	-20	70	°C

**Electrical Characteristics (VDD=5.0±0.25V 25°C)**

PARAMETER	SYM	CONDITION	MIN	TYP	MAX	UNIT
INPUT HIGH VOLTAGE	$V_{IH}$	-	2.2	-	-	V
INPUT LOW VOLTAGE	$V_{IL}$	-	-	-	.6	V
OUTPUT HIGH VOLTAGE	$V_{OH}$	$I_{OH}=0.2mA$	2.4	-	-	V
OUTPUT LOW VOLTAGE	$V_{OL}$	$I_{OL}=1.2mA$	-	-	0.4	V
POWER SUPPLY CURRENT	$I_{DD}$	$V_{DD}=5.0V$	-	1.0	2.2	mA
POWER SUPPLY FOR LCD	$V_{DD}-V_L$	$TA=25°C$	4.3	-	4.7	V
DRIVE METHOD	1/16 Duty					

**Pin Connections**

PIN NO.	SYMBOL	LEVEL	FUNCTION
1	$V_{SS}$	-	Power supply
2	$V_{DD}$	-	
3	$V_L$	-	
4	RS	H/L	H: Data input L: Instruction data input
5	R/W	H/L	H: Data read L: Data write
6	E	H,H→L	Enable signal
7	D0	H/L	Data bus
8	D1	H/L	
9	D2	H/L	
10	D3	H/L	
11	D4	H/L	
12	D5	H/L	
13	D6	H/L	
14	D7	H/L	