HDG1602F-1

Chip On Glass technology

Dimensional Drawing

Dimension tolerance: +/-0.3mm
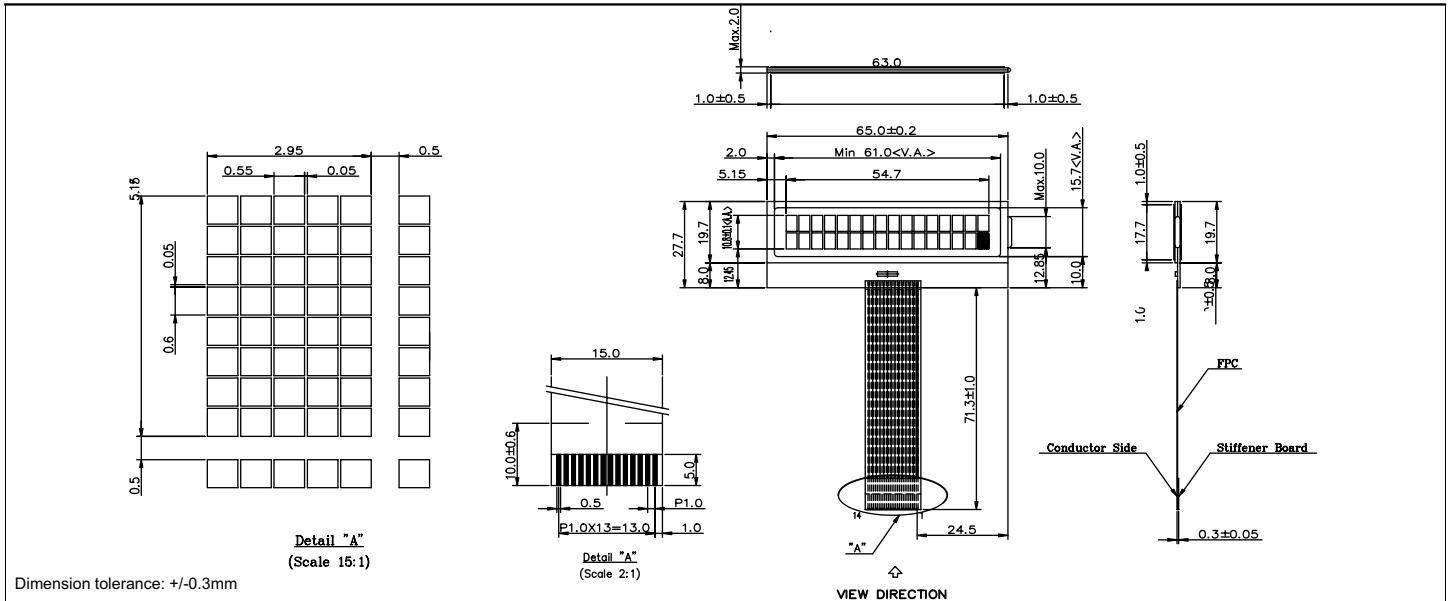
Features

Character Format ....5x7 Dots with Cursor
Connection ....Flat Flex Cable
Options...STN, Reflective Polarizer
Characters........................240 in ROM, 8 user designed in RAM

Physical Data

Module Size......................................65.0W x 27.7H x 2.0T mm
Viewing Area Size..61.0W x 15.7H mm
Character Size...2.95W x 5.15H mm
Weight...6.8 g

Absolute Maximum Ratings

PARAMETER	SYMBOL	MIN	MAX	UNIT
SUPPLY VOLTAGE	V_{DD}-V_{SS}	-0.3	6.0	V
SUPPLY VOLTAGE FOR LCD	V_{DD}-V_L	0	11.0	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}	-	$0.7V_{DD}$	-	V_{DD}	V
INPUT LOW VOLTAGE	V_{IL}	-	V_{SS}	-	$0.2V_{DD}$	V
OUTPUT HIGH VOLTAGE	V_{OH}	I_{OH}=0.2mA	$0.8V_{DD}$	-	V_{DD}	V
OUTPUT LOW VOLTAGE	V_{OL}	I_{OL}=1.2mA	V_{SS}	-	$0.2V_{DD}$	V
POWER SUPPLY CURRENT	I_{DD}	V_{DD}=5V	-	0.82	1.4	mA
POWER SUPPLY FOR LCD	V_{DD}-V_L	TA=25°C	4.1	4.5	4.9	V
DRIVE METHOD		1/16 Duty				

Block Diagram
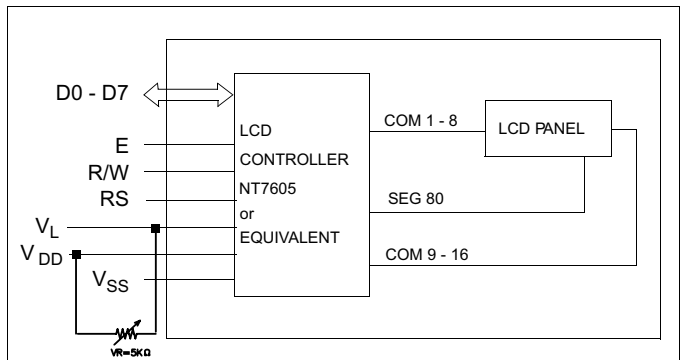
Pin Connections

PIN NO.	SYMBOL	LEVEL	FUNCTION
1	RS	H/L	H: Data input L: Instruction data input
2	R/W	H/L	H: Data read L: Data write
3	E	H,H! L	Enable signal
4	D0	H/L	
5	D1	H/L	
6	D2	H/L	
7	D3	H/L	
8	D4	H/L	Data bus
9	D5	H/L	
10	D6	H/L	
11	D7	H/L	
12	V_{SS}	0V	
13	V_{DD}	5V	Power supply
14	V_L	~+0.6V	Contrast control