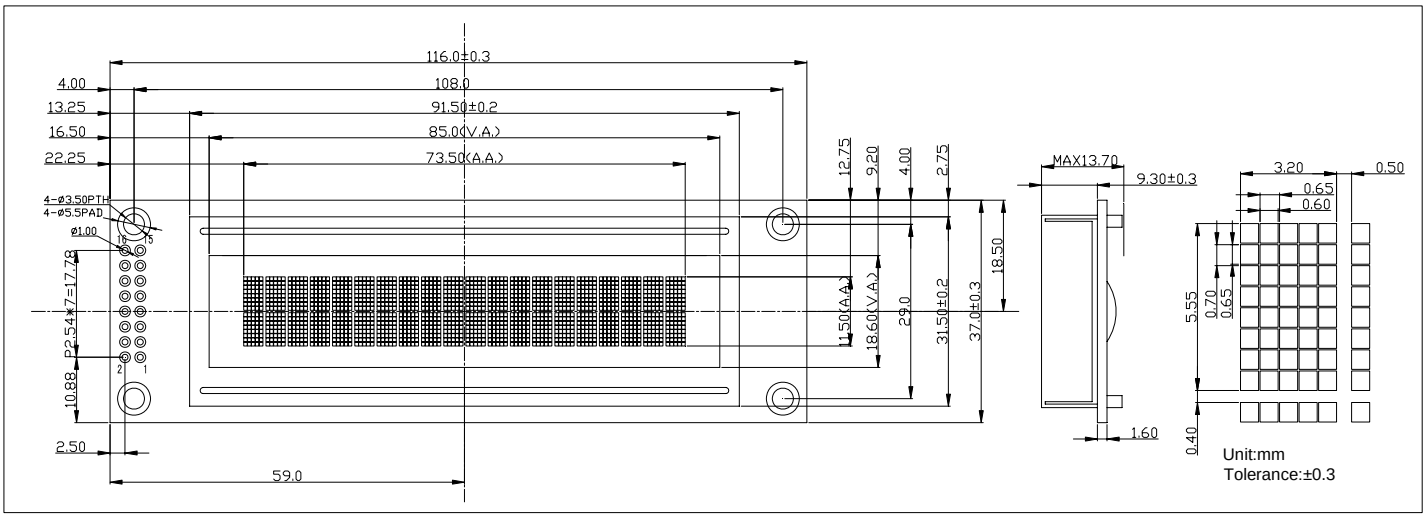
HC2022 1/16DUTY 1/5BIAS



PIN CONNECTIONS

Pin	Symbol	Level	Function
1	V_{SS}	0V	GND
2	V_{DD}	+5.0V	Power supply for Logic
3	V_0	-	Operating voltage for LCD
4	RS	H/L	H: Data L: Command
5	R/W	H/L	H: Read L: Write
6	E	H/L	Enable signal
7	DB0	H/L	Data bus line
8	DB1		
9	DB2		
10	DB3		
11	DB4		
12	DB5		
13	DB6		
14	DB7		
15	LEDA	+5V	Power supply for LED backlight
16	LEDK	0V	

NOTES:

1. Built-in controller (ST7066U-0A or equivalent)
2. 5.0V /3.3V power supply optional.
3. 4-/8-bit 68XX MPU/4 lines SPI/IIC serial peripheral interface optional

MECHANICAL DATA

Item	Nominal Dimensions	Unit
Module Size（W x H x T）	116.0X37.0X13.7MAX	mm
Viewing Area (W x H)	85.0X18.6	mm
Character Size (W x H)	3.20X5.55	mm
Dot Size (W x H)	0.60X0.65	mm

ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Min.	Max.	Unit
Supply Voltage (Logic)	V_{DD}-V_{SS}	-0.3	5.5	V
Supply Voltage (LCD)	V_{DD}-V_O	-0.3	13.0	V
Operating Temp.	T_{OPR}	-20	+70	℃
Storage Temp.	T_{STG}	-30	+80	℃

ELECTRICAL CHARACTERISTICS (V_{DD}=5.0V, Ta=25℃)

Item	Symbol	Min.	Typ.	Max.	Unit
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}	2.4		V_{DD}	V
Output Low Voltage	V_{OL}	-	-	0.4	V
Supply Current	I_{DD}	-	1.5	-	mA
LCD Driving Voltage	V_{DD}-V_0	-	4.3	-	V

LED BACKLIGHT SPECIFICATIONS (Ta=25℃)

Item	Forward Voltage	Forward Current
Yellow-green	4.1V	140mA
White	3.1V	30 mA

TSINGTEK DISPLAY