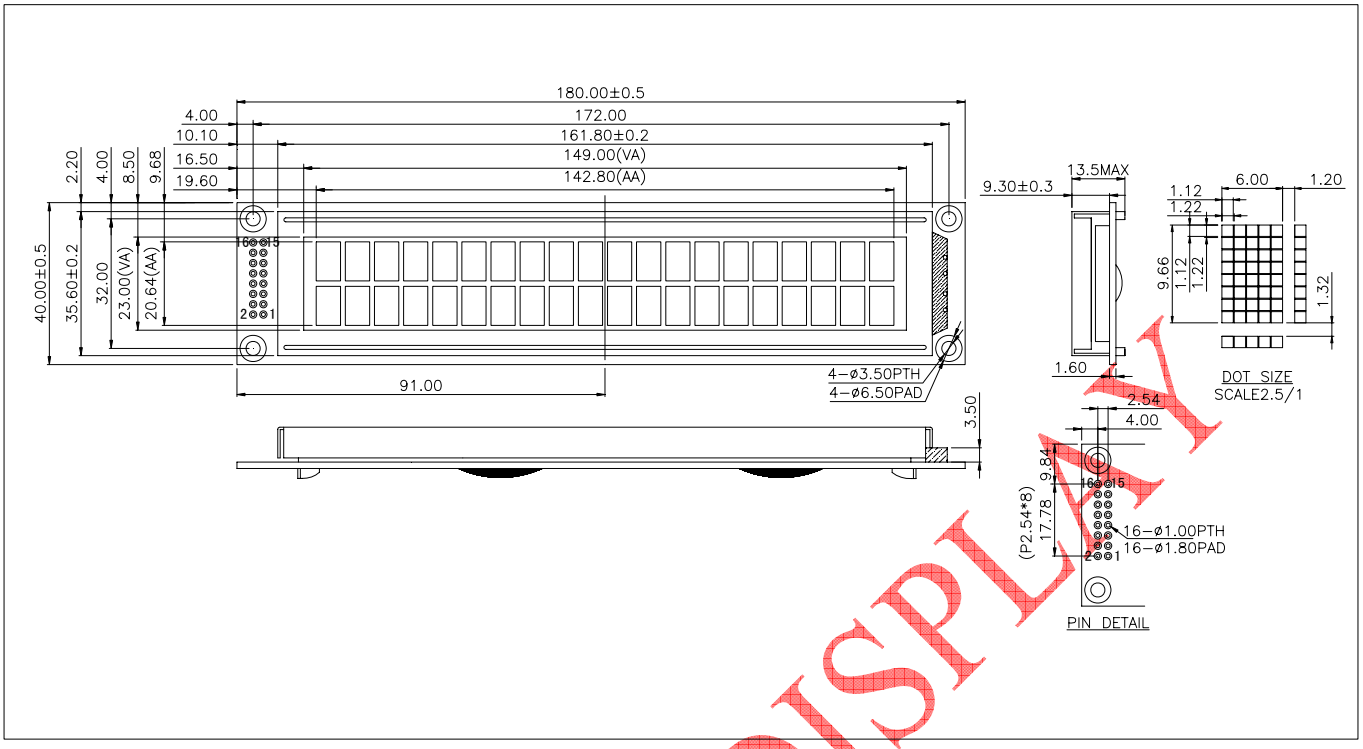
HC2023 1/16DUTY 1/5BIAS



PIN CONNECTIONS

Pin	Symbol	Level	Function
1	V_{SS}	0V	GND
2	V_{DD}	+5V	Power suply for logic
3	V_O	-	Operating voltage for LCD
4	RS	H/L	"H" Data "L" Instruction code
5	R/W	H/L	"H"Read, "L"Write
6	E	H→L	Enable signal IC1
7 | 14	DB0 | DB7	H/L	Data bus
15	LEDA	+5V	Power supply for LED Backlight
16	LEDK	0V	

NOTES:

1.Built-in controller(KS0066 or Equivalent)

2.+5V/+3.3V power supply optional

MECHANICAL DATA

Item	Nominal Dimensions	Unit
Module Size（W x H x T）	180.0X40.0X13.5	mm
Viewing Area (W x H)	149.0 X23.0	mm
Character Size (W x H)	6.0X9.66	mm
Dot Size (W x H)	1.12X1.12	mm

ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Min.	Max.	Unit
Supply Voltage(Logic)	V_{DD}-V_{SS}	-0.3	7.0	V
Supply Voltage(LCD)	V_{DD}- V_O	-0.3	7.0	V
Input Voltage	V_I	-0.3	V_{DD}+0.3	V
Operating Temp	T_{OPR}	-20	70	℃
Storage Temp	T_{STG}	-30	80	℃

ELECTRICAL CHARACTERISTICS(V_{DD}=5V, 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	-	0.4	V
Supply Current	I_{DD}	-	-	-	mA
LCD Driving Voltage	V_{DD}- V_O	-	5.0	-	V

LED BACKLIGHT SPECIFICATION (Ta=25℃)

Item	Forward Voltage	Forward Current
WHITE	3.1V	30mA
YELLOW-GREEN	4.1V	420mA

TSINGTEK DISPLAY