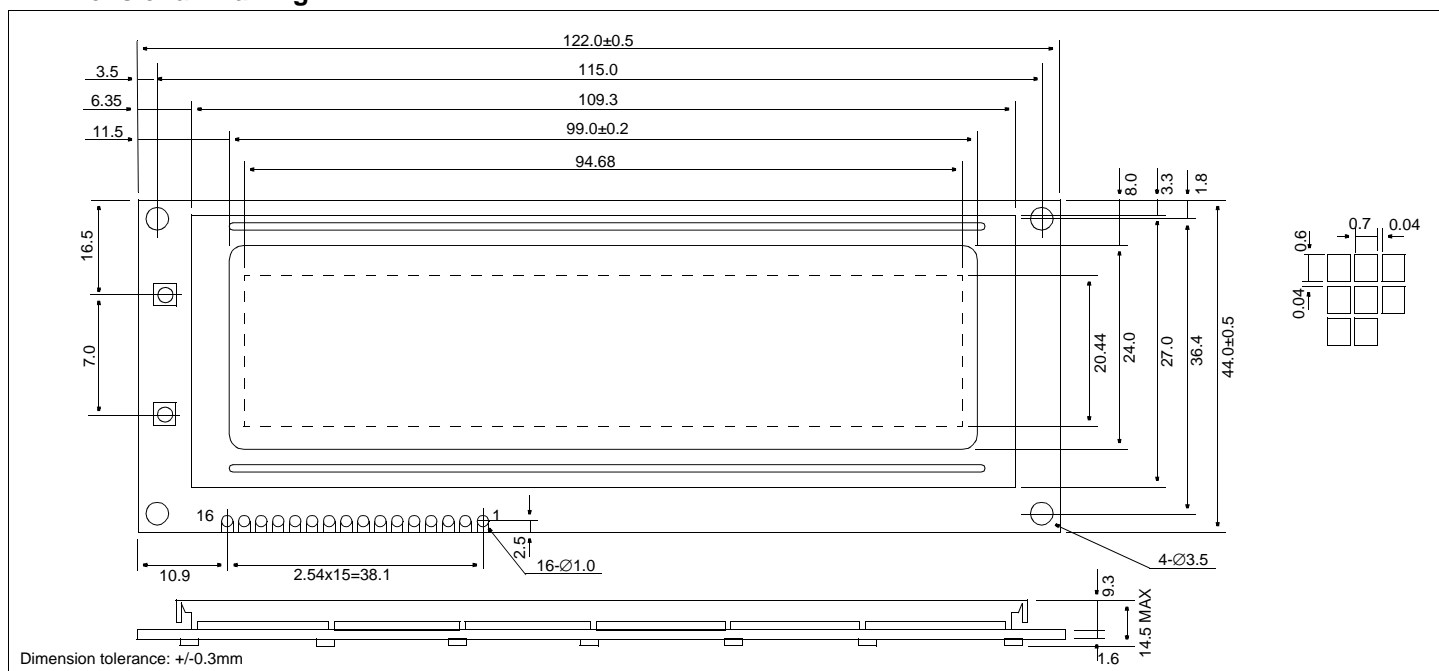


HDM32GS12L-4

Dimensional Drawing

128 X 32 Dots Graphic, LED Back Light



Features

- Backlight.....LED
- Options.....Yellow STN
- Extended Temperature
- Top Viewing
- Built-in Controller.....Sanyo LC7981

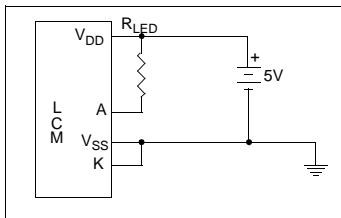
Physical Data

- Module Size.....122.0W x 44.0H x 14.5T mm
- Viewing Area Size.....99.0W x 24.0H mm
- Dot Pitch.....0.74W x 0.64H mm
- Dot Size.....0.70W x 0.60H mm
- Weight.....78g

Absolute Maximum Ratings

PARAMETER	SYMBOL	MIN	MAX	UNIT
SUPPLY VOLTAGE	$V_{DD}-V_{SS}$	-0.3	6.5	V
INPUT VOLTAGE	$V_{DD}-V_6$	0	28.0	V
OPERATING TEMPERATURE	T_{OP}	-20	70	°C
STORAGE TEMPERATURE	T_{STG}	-30	80	°C

Power Supply



Pin Connections

PIN NO.	SYMBOL	LEVEL	FUNCTION
1	LED _A	-	Anode for LED Backlight
2	LED _C	-	Cathode for LED Backlight
3	V _{SS}	0V	Ground
4	V _{DD}	5V	Power supply for logic
5	N/C		No Connection
6	RS	H/L	Register Select
7	R/W	H/L	H=Read/L=Write
8	E	H,H→L	Enable signal
9	DB0	H/L	Data bus
10	DB1	H/L	
11	DB2	H/L	
12	DB3	H/L	
13	DB4	H/L	
14	DB5	H/L	
15	DB6	H/L	
16	DB7	H/L	

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

PARAMETER	SYM	CONDITION	MIN	TYP	MAX	UNIT
OPERATING VOLTAGE	V _{DD}	-	4.75	5.0	5.25	V
POWER FOR LCD	V _{DD} -V _L	V _{DD} =5V	4.5	5.7	6.5	V
INPUT HIGH VOLTAGE	V _{IH}	-	.8V _{DD}	-	V _{DD}	V
INPUT LOW VOLTAGE	V _{IL}	-	GND	-	.2V _{DD}	V
POWER SUPPLY CURRENT	I _{DD}	V _{DD} =5.0V	-	-	-	mA
POWER SUPPLY CURRENT	I _{LCD}	V _{EE} = -5.0V	-	-	5.0	mA
LED SUPPLY CURRENT	I _{LED}	-	-	-	-	mA

This is a +5v only module which has a built in inverter for the LCD voltage.