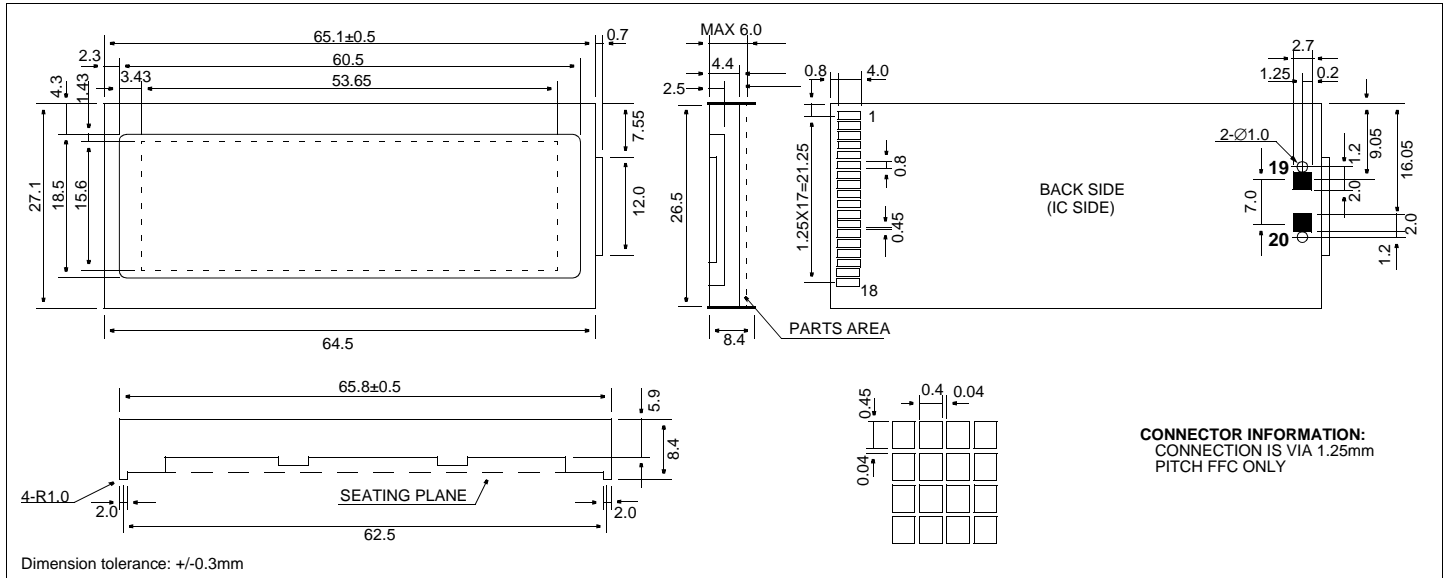


# HDM32GS12Y-3

## Dimensional Drawing

122 X 32 Dots Graphic, Small Size



### Features

- Backlight.....EL Optional
- Options.....Gray STN / Yellow STN
- Normal/Extended Temperature
- Bottom / Top Viewing
- Built-in Controller.....SED1520DAA

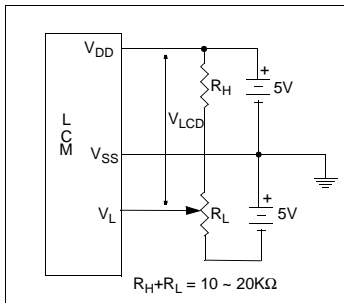
### Absolute Maximum Ratings

PARAMETER	SYMBOL	MIN	MAX	UNIT
SUPPLY VOLTAGE	$V_{DD}-V_{SS}$	0	6.3	V
INPUT VOLTAGE	$V_{IN}$	-	6.3	V
OPERATING TEMPERATURE	$T_{OP}$	0	50	°C
STORAGE TEMPERATURE	$T_{STG}$	-20	70	°C

### Physical Data

- Module Size.....65.8W x 27.1H x 8.4 mm
- Viewing Area Size.....60.5W x 18.5H mm
- Dot Pitch.....0.44W x 0.49H mm
- Dot Size.....0.40W x 0.45H mm
- Weight.....19g

### Power Supply



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

PARAMETER	SYM	CONDITION	MIN	TYP	MAX	UNIT
INPUT HIGH VOLTAGE	$V_{IH}$	-	0.8 $V_{DD}$	-	-	V
INPUT LOW VOLTAGE	$V_{IL}$	-	-	-	0.2 $V_{DD}$	V
POWER SUPPLY CURRENT	$I_{DD}$	$V_{DD}=5.0V$	-	-	1.5	mA
POWER SUPPLY FOR LCD	$V_{DD}-V_L$	$T_A=25^\circ C$	4.5	-	6.5	V
DRIVE METHOD	1/32 DUTY					

### Pin Connections

PIN NO.	SYMBOL	H/L	FUNCTION
1	AØ	H/L	L=Instruction, H=Data
2	CS2	L	Chip select
3	CS1	L	Chip select
4	CL	H/L	External clock (2kHz)
5	RD(E)	-	RD (80 series), E (68 series)
6	WR (R/W)	-	WR (80 series), R/W (68 series)
7	$V_{SS}$	0V	Ground
8	DB0	H/L	Data bus
9	DB1	H/L	
10	DB2	H/L	
11	DB3	H/L	
12	DB4	H/L	
13	DB5	H/L	
14	DB6	H/L	
15	DB7	H/L	
16	$V_{DD}$	5V	Power supply for logic
17	RES	H/L	L=80 series, H=68 series
18	$V_L$	-	Operating voltage for LC
19	$V_{EL}$	-	Power supply for EL backlight
20	$V_{EL}$	-	