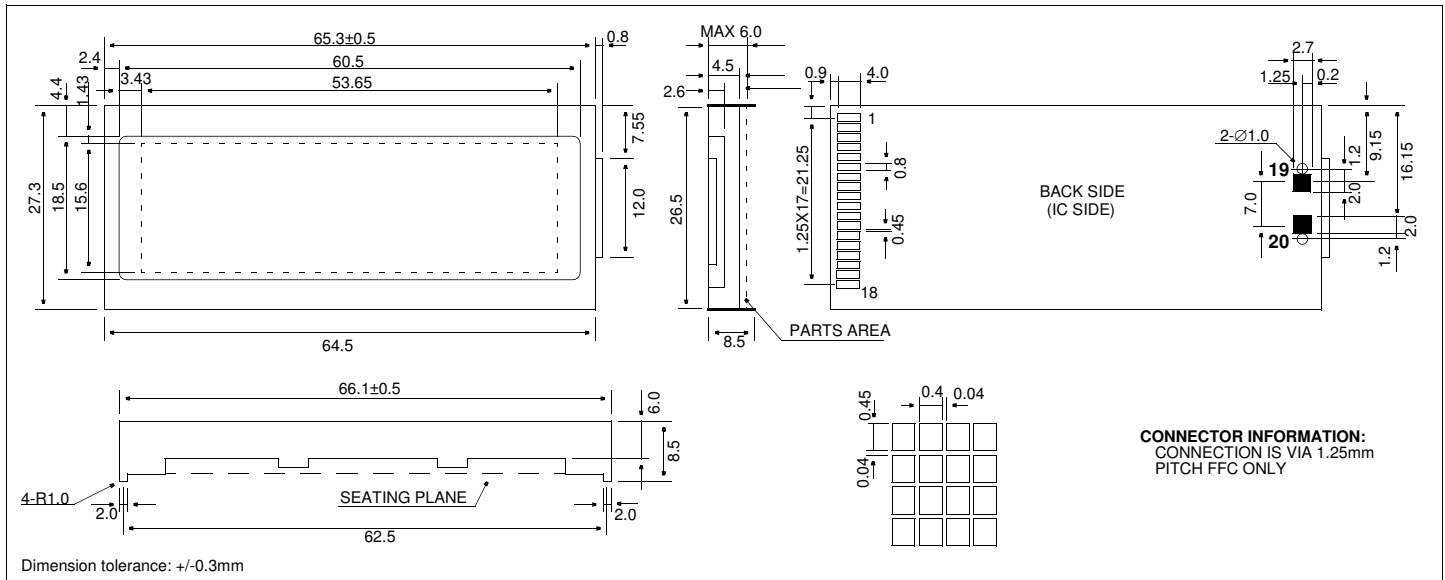


HDM32GS12Y-3

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

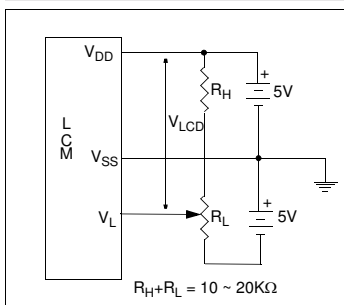
Physical Data

Module Size.....66.1W x 27.3H x 8.5 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.....17g

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 FOR LCD	$V_{DD}-V_L$	$T_A=25^{\circ}C$		5.4		V
POWER SUPPLY CURRENT	I_{DD}	$V_{DD}=5.0V$	-	0.4	.06	mA
POWER CURRENT FOR EL	I_{EL}	$V_{BL}=110VAC$ 400Hz		2.1	3.5	mA
DRIVE METHOD			1/32 DUTY			

Power Supply



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

Pin Connections

PIN NO.	SYMBOL	FUNCTION	
1	AØ	H/L	L= Instruction, H= Data
2	CS2	L	Chip select
3	CST	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}	-	