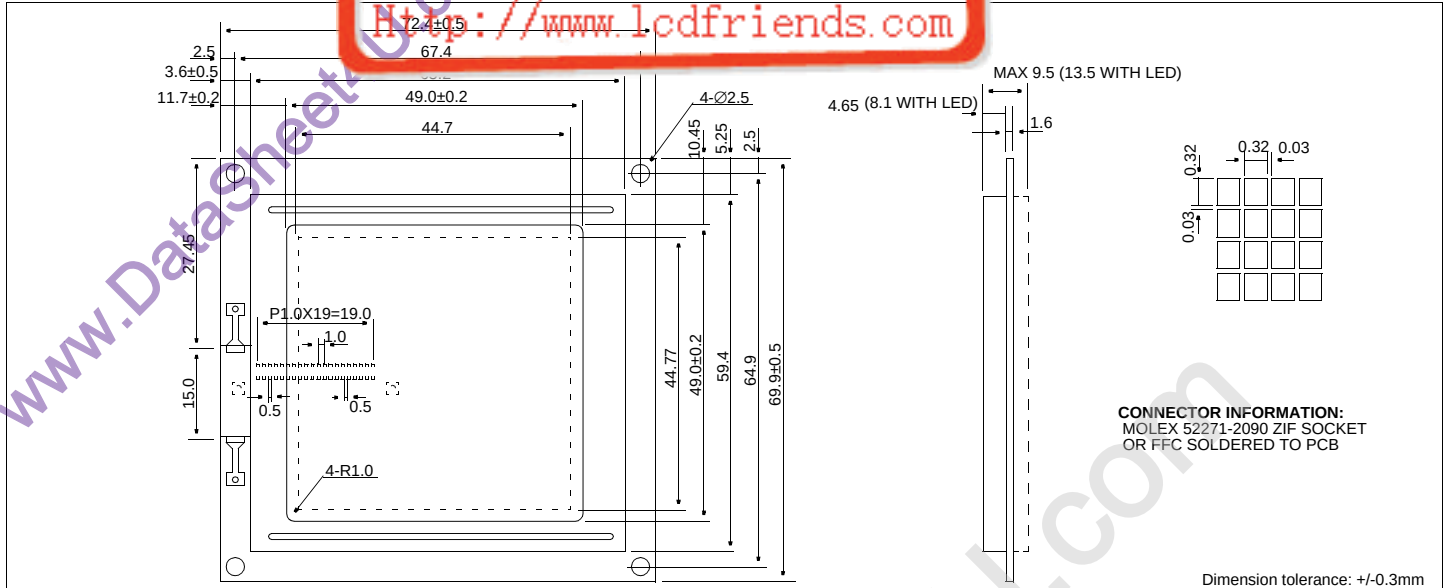


HDM128GS12_-1

Dimensional Drawing

液晶之友 电话: 020-33819057
<http://www.lcdfriends.com>

128 X 128 Dots Graphic, Small Size



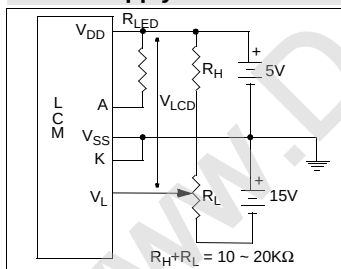
Features

Backlight.....EL or LED Optional
 Options.....Gray STN / Yellow STN
 Normal/Extended Temperature
 Bottom / Top Viewing
 Built-in Controller.....Toshiba T6963C

Physical Data

Module Size.....(None or EL) 72.4W x 69.9H x 9.5T mm
 (LED) 72.4W x 69.9H x 13.5T mm
 Viewing Area Size.....49.0W x 49.0H mm
 Dot Pitch.....0.35W x 0.35H mm
 Dot Size.....0.32W x 0.32H mm
 Weight.....55g

Power Supply



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

PARAMETER	SYM	CONDITION	MIN	TYP	MAX	UNIT
OPERATING VOLTAGE	V _{DD}	-	4.5	5.0	5.5	V
POWER SUPPLY FOR LCD	V _{DD} -V _L	-	16.7	17.7	18.6	V
INPUT HIGH VOLTAGE	V _{IH}	-	V _{DD} -2.2	-	V _{DD}	V
INPUT LOW VOLTAGE	V _{IL}	-	0	-	0.8	V
OUTPUT HIGH VOLTAGE	V _{OH}	I _{OH} =0.2mA	V _{DD} -0.4	-	V _{DD}	V
OUTPUT LOW VOLTAGE	V _{OL}	I _{OL} =1.2mA	0	-	0.4	V
POWER SUPPLY CURRENT	I _{DD}	V _{DD} =5.0V	-	-	4.0	mA
LED CURRENT	I _{LED}	V _{LED} =4.2V	160	250	320	mA
DRIVE METHOD	1/128 Duty					

Absolute Maximum Ratings

PARAMETER	SYMBOL	MIN	MAX	UNIT
SUPPLY VOLTAGE	V _{DD} -V _{SS}	0	7.0	V
POWER SUPPLY FOR LCD	V _L		-21.0	V
INPUT VOLTAGE	V _{IN}	0	7.0	V
OPERATING TEMPERATURE	T _{OP}	0	50	°C
STORAGE TEMPERATURE	T _{STG}	-20	70	°C

Pin Connections

PIN NO.	SYMBOL	FUNCTION	
1	V _{SS}	0V	Ground
2	V _{DD}	5V	Power supply for logic
3	V _L	-	Operating voltage for LC
4	WR	L	Data write
5	RD	L	Data read
6	CE	L	Chip enable
7	CD	H/L	H=Command, L=Data
8	RESET	L	Reset
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	
17	FS	H/L	Font select
18	N/C	-	No connection
19	K	-	LED Backlight
20	A	-	LED Backlight