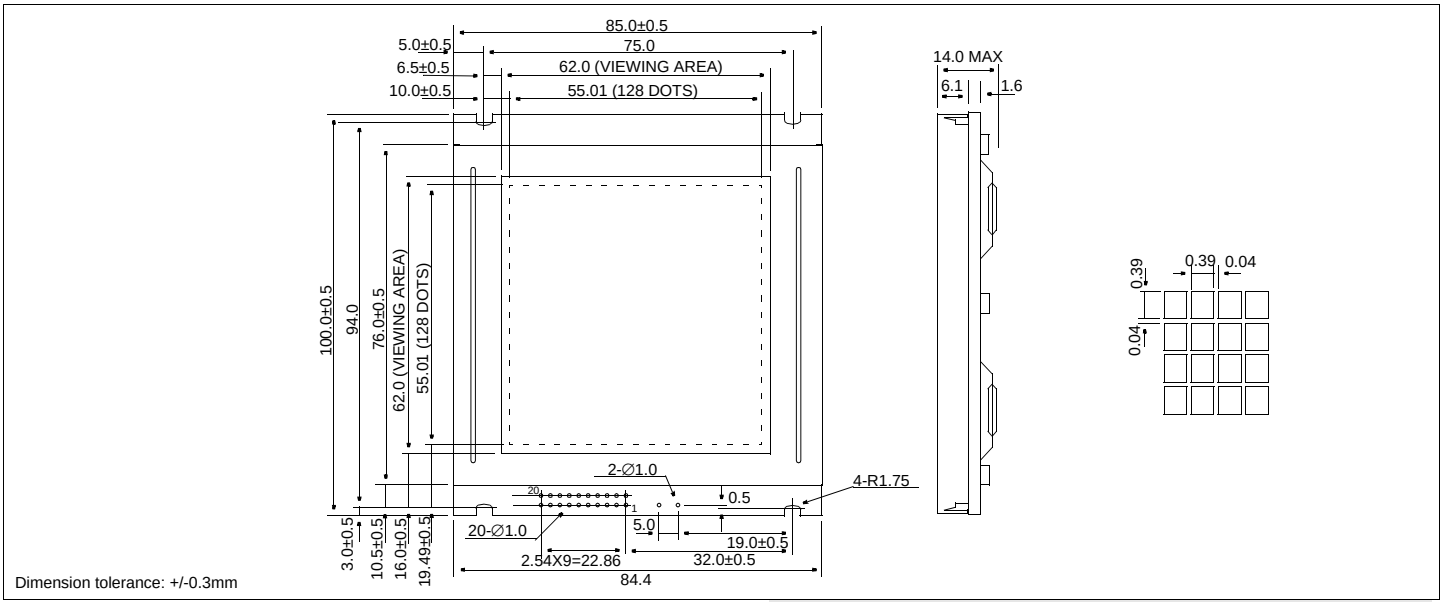
HDM128GS12Y

128 X 128 Dots Graphic

Dimensional Drawing



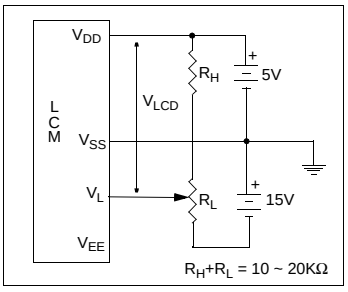
Features

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.....85.0W x 100.0H x 14.0T mm
Viewing Area Size.....62.0W x 62.0H mm
Dot Pitch.....0.43W x 0.43H mm
Dot Size.....0.39W x 0.39H mm
Weight.....100g

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	-	17.0	17.5	18.0	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	-	13.0	20.0	mA
LED FORWARD VOLTAGE	V_F	I_F=500mA	3.8	4.2	4.6	V
BRIGHTNESS	L	I_F=500mA	152	180	-	NIT
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	-	-30.0	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	FG	Frame ground	
2	V_{SS}	0V	Ground
3	V_{DD}	5V	Power supply for logic
4	V_L	-	Operating voltage for LC
5	WR	L	Data write
6	RD	L	Data read
7	CE	L	Chip enable
8	CD	H/L	H=Command, L=Data
9	N/C	No connection	
10	RESET	L	Reset
11	DB0	H/L	Data bus
12	DB1	H/L	
13	DB2	H/L	
14	DB3	H/L	
15	DB4	H/L	
16	DB5	H/L	
17	DB6	H/L	
18	DB7	H/L	
19	FS	H/L	Font select
20	N/C	No connection	