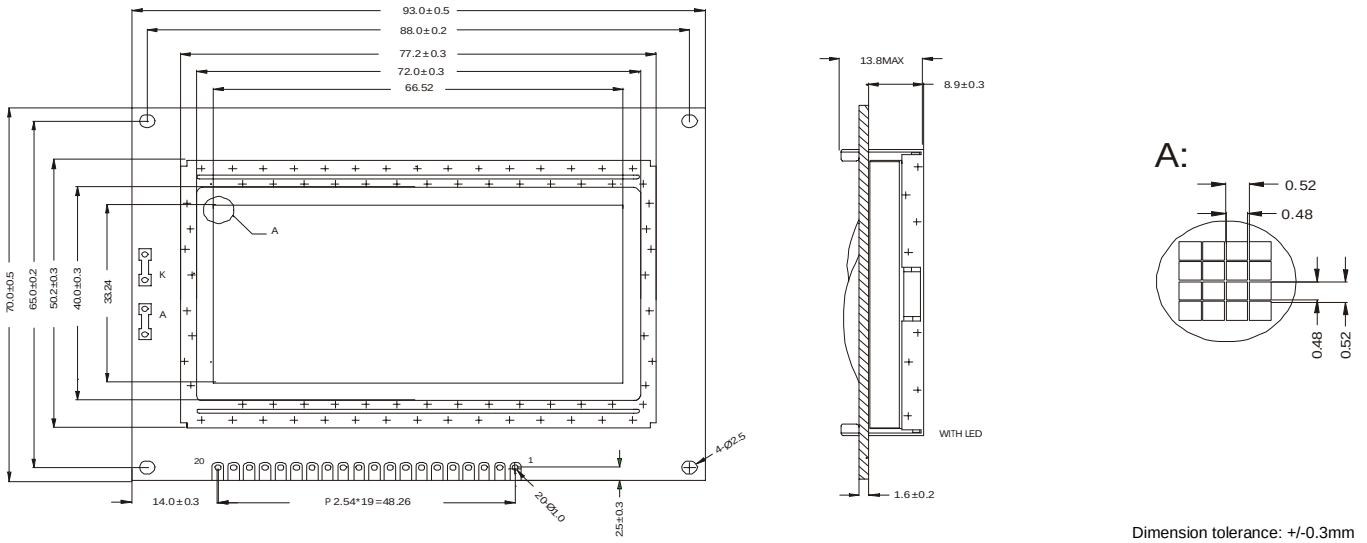
HDM64GS12_-R

128 X 64 Dots Graphic

Dimensional Drawing



Dimension tolerance: +/-0.3mm

Features

Backlight..... LED, NONE
Options.....Gray or Yellow STN, Black & White FSTN
Normal/Extended Temperature
Bottom / Top Viewing
Built-in Controller.....Samsung KS108B
Built-in DC-DC converter

Physical Data

Module Size (LED Backlight).....93.0W x 70.0H x 13.8T mm
Viewing Area Size.....70.7W x 38.8H mm
Dot Pitch.....0.52W x 0.52H mm
Dot Size.....0.48W x 0.48H mm
Weight..... 69g

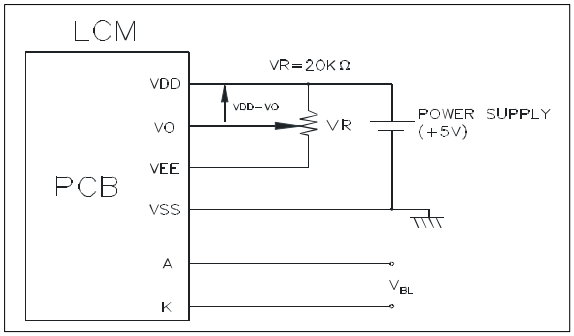
Absolute Maximum Ratings

PARAMETER	SYMBOL	MIN	MAX	UNIT
Supply Voltage	V_{DD}-V_{SS}	0	7.0	V
Input Voltage	V_{IN}	-	7.0	V
Operating Temperature	T_{OP}	0	50	°C
Storage Temperature	T_{STG}	-20	70	°C
LED Peak Forward Current	I_P		720	mA

Electrical Characteristics (VDD=5.0±0.5V 25°C)

PARAMETER	SYM	CONDITION	MIN	TYP	MAX	UNIT
Input High Voltage	V_{IH}	-	.7 V_{DD}	-	V_{DD}	V
Input Low Voltage	V_{IL}	-	-	-	.3 V_{DD}	V
Power Supply Voltage	V_{DD}-V_L	V_{DD}=5.0V	9.2	9.7	10.2	V
Power Supply Current	I_{DD}	V_{DD}=5.0V	-	2.3	-	mA
LED Forward Voltage	V_F	I_F=230mA	3.9	4.1	4.3	mV
LED Forward Current	I_F	V_F=4.1V	-	250	540	mA
Brightness	L	-	184	230	-	cd/m²
DRIVE METHOD	1/64 Duty					

Power Supply



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	D/I	H/L	1=Data, 0=Instruction
5	R/W	H/L	1=Data read, 0=Data write
6	E	H/H->L	Enable
7	DB0	H/L	Data bus
8	DB1	H/L	
9	DB2	H/L	
10	DB3	H/L	
11	DB4	H/L	
12	DB5	H/L	
13	DB6	H/L	
14	DB7	H/L	
15	CS1	H	Left Half Chip Select
16	CS2	H	Right Half Chip Select
17	RS	L	Reset
18	V_{EE}	Output	#
19	A	-	LED Anode
20	K	-	LED Cathode

Has built-in inverter for negative power supply