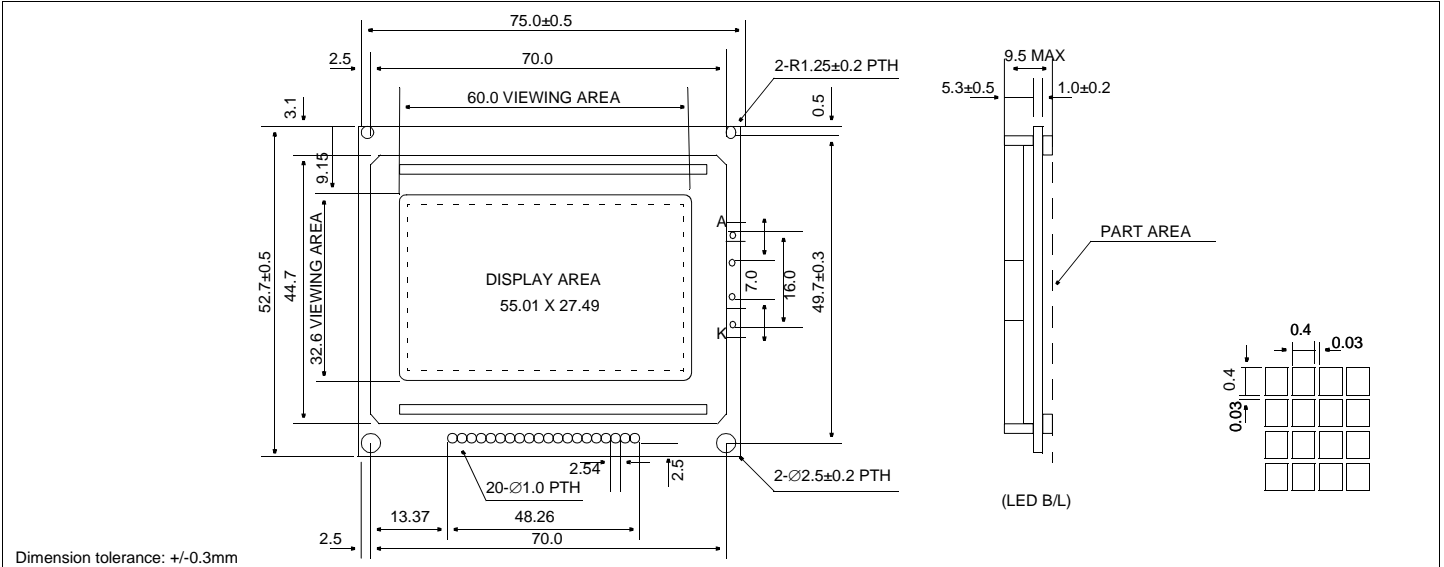


HDM 64GS12L-4

Dimensional Drawing

128 X 64 Dots Graphic, Small Size



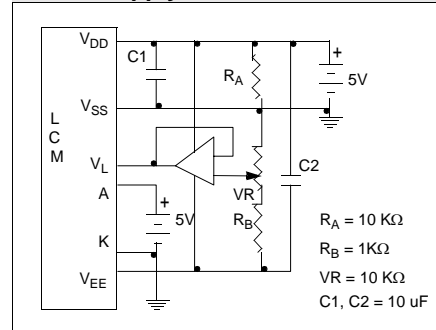
Features

- Backlight..... LED
- Options..... Yellow STN / FSTN
- Normal/Extended Temperature
- Bottom / Top Viewing
- Built-in Controller..... Samsung KS0108
- Built-in Temperature Compensation

Physical Data

- Module Size (LED Backlight).....75.0W x 52.7H x 9.5T mm
- Viewing Area Size.....60.0W x 32.6H mm
- Dot Pitch.....0.43W x 0.43H mm
- Dot Size.....0.40W x 0.40H mm
- Weight.....35.6g (LED)

Power Supply



Absolute Maximum Ratings

PARAMETER	SYMBOL	MIN	MAX	UNIT
SUPPLY VOLTAGE	$V_{DD}-V_{SS}$	- 0.3	7.0	V
SUPPLY VOLTAGE FOR LCD	$V_{DD}-V_L$	0	21.0	V
INPUT VOLTAGE	V_{IN}	- 0.3	V_{DD}	V
OPERATING TEMPERATURE	T_{OP}	0	50	°C
STORAGE TEMPERATURE	T_{STG}	- 20	70	°C

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

PARAMETER	SYM	CONDITION	MIN	TYP	MAX	UNIT
INPUT HIGH VOLTAGE	V_{IH}	-	0.7 V_{DD}	-	V_{DD}	V
INPUT LOW VOLTAGE	V_{IL}	-	0	-	0.3 V_{DD}	V
POWER SUPPLY FOR LCD	$V_{DD}-V_L$	$T_A=25^\circ C$	8.4	8.7	9.0	V
POWER SUPPLY CURRENT	I_{DD}	$V_{DD}=5.0V$	-	2.0	5.0	mA
LED B/L Supply Current	I_{LED}	$V_L=5.0V$	-	150	200	mA
DRIVE METHOD	1/64 Duty					

Pin Connections

PIN NO.	SYMBOL	LEVEL	FUNCTION
1	V_{DD}	5V	Power supply for logic
2	V_{SS}	0V	Ground
3	V_L	-	Operating voltage for LCD
4	DB0	H/L	Data bus
5	DB1	H/L	
6	DB2	H/L	
7	DB3	H/L	
8	DB4	H/L	
9	DB5	H/L	
10	DB6	H/L	
11	DB7	H/L	
12	CS1	L	Chip Select 1
13	CS2	L	Chip Select 2
14	RST	L	Reset
15	R/W	H/L	1=Read, 0= Write
16	D/I	H/L	1=Data, 0=Instruction
17	E	H/H->L	Enable
18	V_{EE}	OUTPUT	#
19	A	-	Anode, LED Backlight
20	K	-	Cathode, LED Backlight

Has built-in inverter for negative power supply