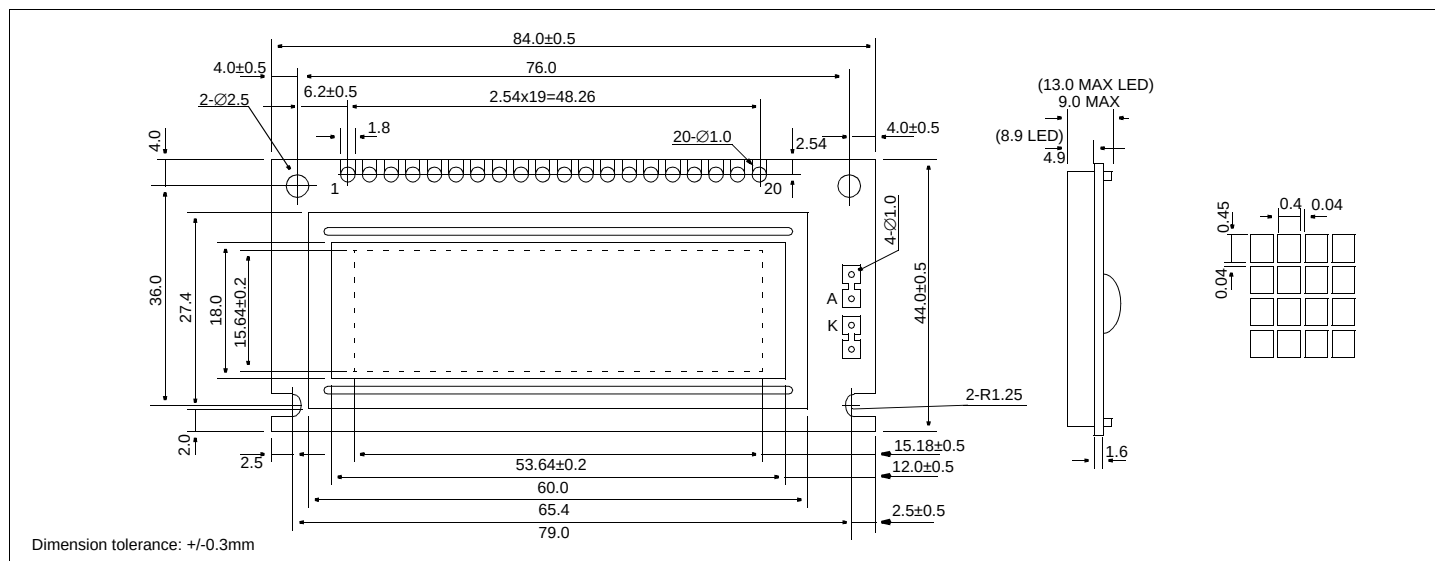


HDM32GS12_-B

Dimensional Drawing

122 X 32 Dots Graphic



Features

Backlight.....	LED or EL Optional
Options.....	Gray STN / Yellow STN
	Normal/Extended Temperature
	Bottom / Top Viewing
Built-in Controller.....	SED1520DAA

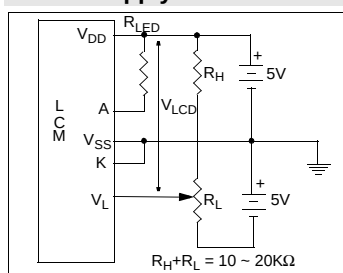
Physical Data

Module Size.....	84.0W x 44.0H x 13.0T mm
Viewing Area Size.....	60.0W x 18.0H mm
Dot Pitch.....	0.44W x 0.49H mm
Dot Size.....	0.40W x 0.45H mm
Weight.....	28g

Absolute Maximum Ratings

PARAMETER	SYMBOL	MIN	MAX	UNIT
SUPPLY VOLTAGE	$V_{DD}-V_{SS}$	0	6.5	V
INPUT VOLTAGE	V_{IN}	-	6.5	V
OPERATING TEMPERATURE	T_{OP}	0	50	°C
STORAGE TEMPERATURE	T_{STG}	-20	70	°C

Power Supply



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 CURRENT	I_{DD}	$V_{DD} = 5.0V$	-	-	2.8	mA
POWER SUPPLY FOR LCD	$V_{DD}-V_L$	$T_A = 25^{\circ}C$	3.9	4.9	6.0	V
LED CURRENT	I_{LED}	$V_{LED} = 4.2V$	-	145	-	mA
DRIVE METHOD	1/32 DUTY					

Pin Connections

PIN NO.	SYMBOL	FUNCTION	
1	A ₀	H/L	L = Instruction, H = Data
2	CS2	L	Chip select
3	CS1	L	Chip select
4	CL		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	A	-	Power supply for LED backlight
20	K	-	