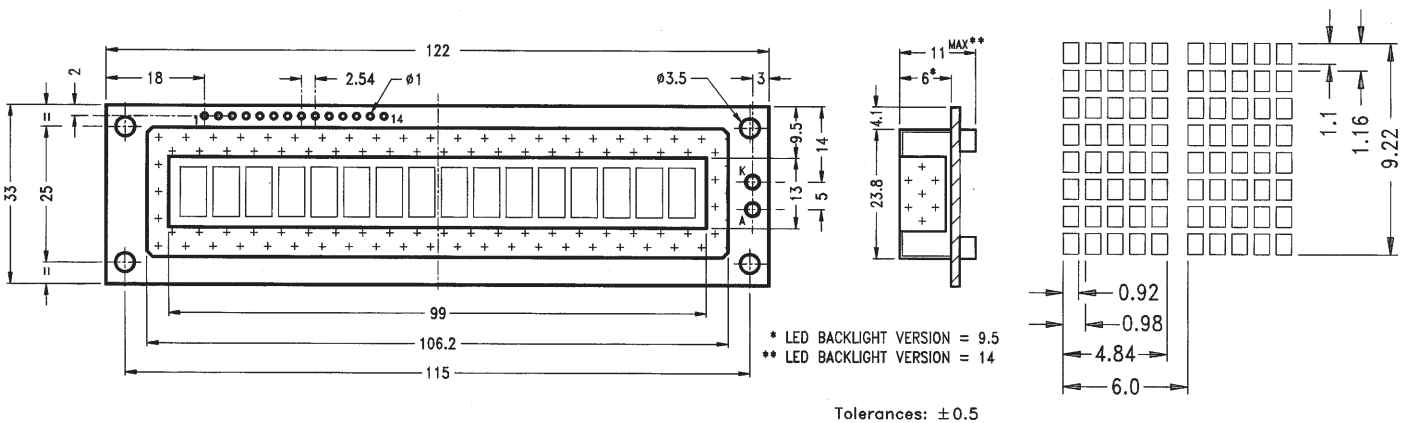


## BT 11608

1 Line x 16 Characters



## Dimensions [mm]

## Dot Size

## MECHANICAL DATA

Parameter	Width x Height x Depth	Unit
Outline Dimensions	122 x 33 x 11 (with LED: 14)	mm
Effective viewing area	99 x 13	mm
Dot Size	9.2 x 1.1	mm
Dot Pitch	0.98 x 1.16	mm
Character Matrix	5 x 7	dots
Character Size	4.84 x 8.06	mm
Character Pitch	6.0	mm
Weight	Approximate 50 (with LED: 55)	g

## ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Min.	Max.	Unit
Supply Voltage (Logic)	$V_{DD}$ ( $V_{DD}-V_{SS}$ )	0	7.0	V
Supply Voltage (LCD Driver)	$V_{EE}$ ( $V_{DD}-V_0$ )	0	13.5	V
Input Voltage	$V_I$	$V_{SS}$	$V_{DD}$	V
Operating Temperature	$T_{OP}$	See Page 11		°C
Storage Temperature	$T_{ST}$	See Page 11		°C

## ELECTRICAL CHARACTERISTICS

Condition:  $T_a = 25^\circ\text{C}$ ,  $V_{DD} = 5.0 \pm 0.25$  V

Parameter	Symbol	Min.	Typ.	Max.	Unit
Input Voltage HIGH	$V_{INH}$	2.2	---	---	V
Input Voltage LOW	$V_{INL}$	---	---	0.6	V
Output Voltage HIGH	$V_{OH}$	2.4	---	---	V
Output Voltage LOW	$V_{OL}$	---	---	0.4	V
Supply Current (Logic)	$I_{DD}$	---	1.0	---	mA
Supply Current (LCD Driver)	$I_0$	---	0.5	---	mA
Duty Ratio	---	---	1 / 8	---	---

## LED BACKLIGHT (STANDARD COLOR GREEN)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Supply Voltage	$V_F$	3.8	4.0	4.2	V
Supply Current	$I_F$ [at 25°C]	---	160	240	mA
Lamp Style	---	---	04	---	---
LED Segments	---	---	16	---	pcs

## PIN TABLE

Pin	Symbol	Signal Description
1	$V_{SS}$	GND (0 V)
2	$V_{DD}$	Power Supply (5 V)
3	$V_0$	Supply Voltage (LCD Driver)
4	RS	Register Select - LOW = Instruction, High = Data
5	R / $\bar{W}$	Read / Write LOW = MPU to LCM, HIGH = LCM to MPU
6	E	Enable R / $\bar{W}$ = LOW: Data are taking over at falling edge of E R / $\bar{W}$ = HIGH: Data can be read at E = 1
7 to 14	DB <sub>0</sub> to DB <sub>7</sub>	Data Bus - Software selectable 4 or 8 Bit Mode
A	$+V_{LED}$	Anode of LED Unit
K	$-V_{LED}$	Cathode of LED Unit

## ADDITIONAL INFORMATION

- ◆ Display Connector Type - without LED: 1 x 14
- ◆ Display Connector Type - with LED: See Drawing
- ◆ Controller Type - SPLC 780 (1) or compatible

## BLOCK DIAGRAM

