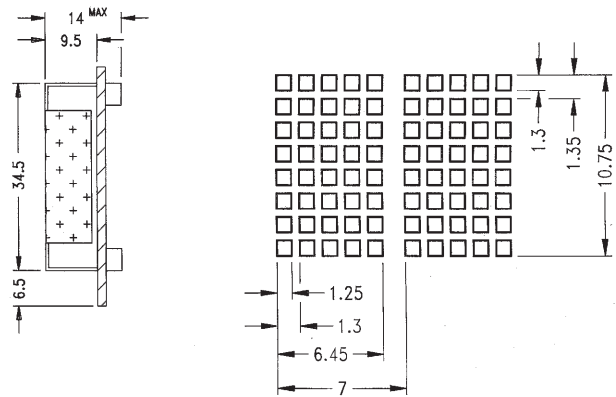
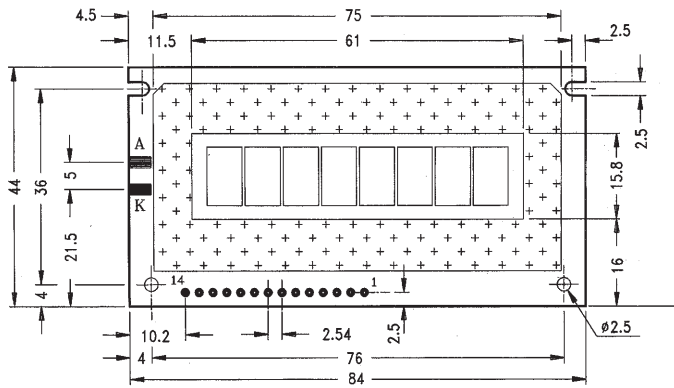


# BT 10809

1 Line x 8 Characters



Tolerances: +/-0.5

## Dimensions [mm]

## Dot Size

### MECHANICAL DATA

Parameter	Width x Height x Depth	Unit
Outline Dimensions	84 x 44 x 11 (with LED: 14)	mm
Effective viewing area	61 x 15.8	mm
Dot Size	1.25 x 1.30	mm
Dot Pitch	1.30 x 1.35	mm
Character Matrix	5 x 7	dots
Character Size	6.45 x 9.40	mm
Character Pitch	7	mm
Weight	Approximate 45 (with LED: 50)	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:  $T_a = 25^\circ\text{C}$ ,  $V_{DD} = 5.0 \pm 0.25\text{ V}$

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	4.1	4.4	V
Supply Current	$I_F$ [at 25°C]	---	90	135	mA
Lamp Style	---	---	04	---	---
LED Segments	---	---	9	---	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 $R / \bar{W} = \text{LOW}$ : Data are taking over at falling edge of E $R / \bar{W} = \text{HIGH}$ : 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 pin
- ◆ Display Connector Type - with LED: See Drawing
- ◆ Controller Type - SPLC 780 (1) or compatible

### BLOCK DIAGRAM

