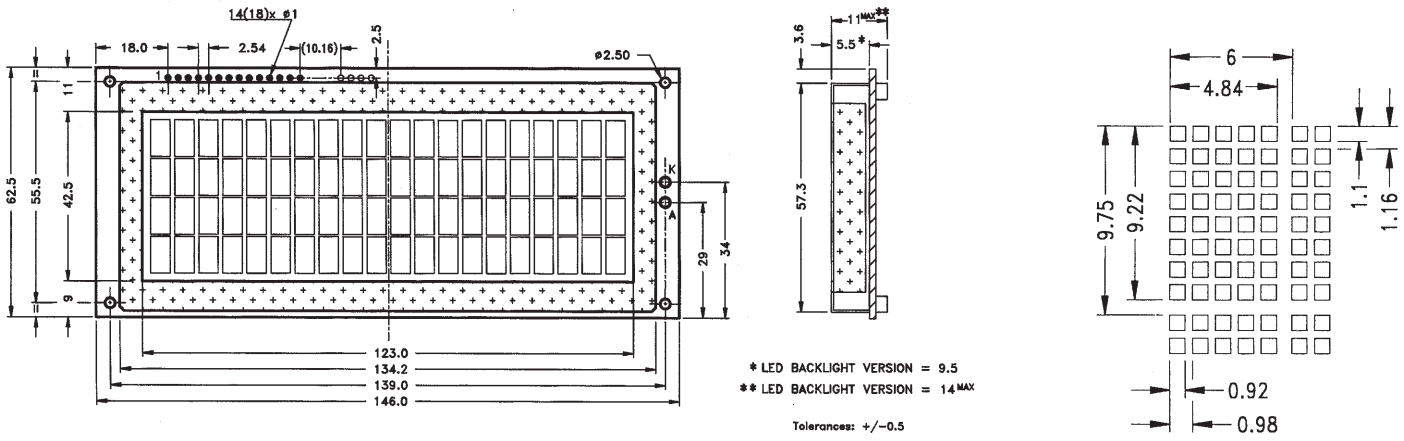
BT 42008

4 Lines x 20 Characters



Dimensions [mm] **Dot Size**

MECHANICAL DATA

Parameter	Width x Height x Depth	Unit
Outline Dimensions	146 x 62.5 x 10 (with LED: 13.5)	mm
Effective viewing area	123.0 x 42.5	mm
Dot Size	0.92 x 1.10	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 x 9.75	mm
Weight	Approximate 100 (with LED: 120)	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

* AV-Types See Page 13

ELECTRICAL CHARACTERISTICS

Condition: Ta = 25°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}	---	1.5	---	mA
Supply Current (LCD Driver)	I_0	---	0.5	---	mA
Duty Ratio	---	---	1 / 16	---	---

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]	---	540	810	mA
Lamp Style	---	---	04	---	---
LED Segments	---	---	54	---	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 / $\overline{W}$	Read / Write LOW = MPU to LCM, HIGH = LCM to MPU	
6	E	Enable R / $\overline{W}$ = LOW: Data are taking over at falling edge of E R / $\overline{W}$ = HIGH: Data can be read at E = 1	
7 to 14	DB_0 to DB_7	Data Bus - Software selectable 4 or 8 Bit Mode	
15	NC	Not Connected	Only AV-Type
16	NC	Not Connected	Only AV-Type
17	VEE*	Negative Voltage Output	Only AV-Type
18	NC	Not Connected	Only AV-Type
A	$+V_{LED}$	Anode of LED Unit	
K	$-V_{LED}$	Cathode of LED Unit	

*AV-Type: do not connect

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