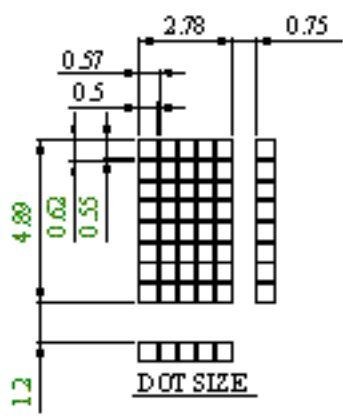
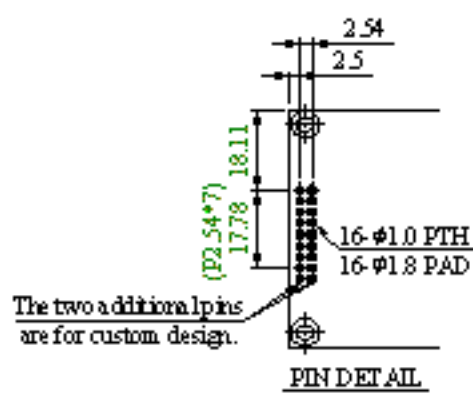


LED B/L EL or NO B/L



Feature

- 1. 1.5x8 dots includes cursor
- 2. Built-in controller (KS 0066 or Equivalent)
- 3. +5V power supply (Also available for +3V)
- 4. 1/16 duty cycle
- 5. LED can be driven by pin1, pin2, pin15, pin16 or A and K
- 6. N.V. Optional for +3V power supply

Mechanical Data

Item	Standard Value	Unit
Module Dimension	190.0 x 54.0	mm
Viewing Area	147.0 x 29.5	mm
Mounting hole	183.0 x 47.0	mm
Character Size	278 x 4.89	mm

Pin NO.	Symbol	Function
1	DB7	H/L Data bus line
2	DB6	H/L Data bus line
3	DB5	H/L Data bus line
4	DB4	H/L Data bus line
5	DB3	H/L Data bus line
6	DB2	H/L Data bus line
7	DB1	H/L Data bus line
8	DB0	H/L Data bus line
9	E1	H → L Enable signal IC1
10	R/W	H/L Read / write
11	RS	Register select
12	V _o	Contrast Adjustment
13	V _{ss}	GND
14	V _{dd}	+5V
15	E2	H → L Enable signal IC2
16	NC/V _{ee}	NC or Negative Voltage output
17	A	+4.2V (RA=0 Ω) for LED
18	K	GND

Absolute Maximum Rating

Item	Symbol	Standard Value			Unit
		min.	typ.	max.	
Power supply	VDD-VSS	-0.3	---	7.0	V
Input Voltage	V _I	-0.3	---	VDD	V

Note : VSS=0 Volt, VDD=5.0Volt.

Electronical Characteristics

Item	Symbol	Condition	Standard Value			Unit
			min.	typ.	max.	
Input Voltage	VDD	VDD=+5V	4.7	5.0	5.3	V
		VDD=+3V	2.7	3.0	5.3	V
Supply Current	IDD	VDD=+5V	---	2.4	3.0	mA
Recommended LC Driving Voltage for Normal Temp. Version module	VDD-V ₀	-20 °C	4.9	5.1	5.5	V
		0 °C	4.5	4.8	5.1	
		25 °C	4.1	4.5	4.7	
		50 °C	3.8	4.2	4.4	
LED Forward Voltage	VF	25 °C	---	4.2	4.6	V
LED Forward Current	IF	25 °C	---	600	1200	mA
EL Power	IEL	Ve1=110 VAC; 400Hz	---	---	5.0	mA

Display Character Address Code:

Display position	1	2	3	4	5	6	7	8	9	10	40	
DD RAM Address	00	01											27	Line 1
DD RAM Address	40	41											67	Line 2
DD RAM Address	00	01											27	Line 3
DD RAM Address	40	41											67	Line 4