



## Feature

1. COB with metal frame
2. No built-in oscillation, requiring external clock
3. Built-in controller SED1520Daa
4. 1/32 duty cycle
5. + 5V single power supply
6. Option: +3V single power supply
7. Option: LED, EL B/L

## Mechanical Data

Item	Standard Value	Unit
Module Dimension	80.0 x 36.0	mm
Viewing Area	60.0 x 18.0	mm
Dot Size	0.4 x 0.45	mm
Dot Pitch	0.44 x 0.49	mm

## Pin Assignment

Pin	Symbol	Function
1	Vss	GND
2	Vdd	+ 5V(+3V option)
3	Vo	Contrast adjustment
4	Ao	H --> Data L --> Instruction
5	/CS1	L --> Chip1 enable
6	/CS2	L --> Chip 2 enable
7	CL	External clock 2KHZ
8	RD/E	RD for 80 serial; /E for 68 serial
9	WR,R/W	WR for 80 serial; R/W for 68 serial
10~17	DB0~7	Data bus line
18	RES	L: 80 series, H: 68 series
19	A/Vee	Power supply for B/L (+)/ Negative voltage output
20	K	Power supply for B/L (GND)

## Electronic Characteristics

Item	Symbol	Condition	Typical Value	Unit
Input Voltage	Vdd	Vdd = +5V	5.0	V
Supply Current	Idd	Vdd = +5V	1.0	mA
LCD Driving Voltage	Vdd-Vo	25°C	4.5	V
LED Forward Voltage	Vf	25°C	4.2	V
LED Forward Current	If	25°C	120	mA
EL Power Voltage	Vel	Vel=110Vac/400Hz		V

## Dimension

