



PIN CONNECTIONS

Pin	Symbol	Level	Function					
1	CS1	H/L	00	01	10			
2	CS2		左	中	右			
3	V _{SS}	0V	GND					
4	V _{DD}	+5V	Power supply for logic					
5	V _O	-	No connection					
6	RS	H/L	“H” Data, “L” Instruction code					
7	R/W	H/L	“H” Read, “L” Write					
8	E	H/L	Enable signal					
9	DB0	H/L	Data bus line					
~	~							
16	DB7							
17	LEDA					+5V	Power supply for LED backlight	
18	LEDA					0V		
19	V _{OUT}					-	No connection	
20	/REST					L	Reset signal ,active “L”	

NOTES:

1. Built-in KS0107/0108 controller
2. +5V power supply optional
3. Yellow green/blue mode optional
4. Temperature compensation optional

MECHANICAL DATA

Item	Nominal Dimensions	Unit
Module Size (W x H x T)	100.0X60.0X15.0	mm
Viewing Area (W x H)	84.0X31.0	mm
Dot Pitch (W x H)	0.41X0.41	mm
Dot Size (W x H)	0.37X0.37	mm

ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Min.	Max.	Unit
Supply Voltage (Logic)	V _{DD} -V _{SS}	-0.3	7.0	V
Supply Voltage (LCD)	V _{DD} -V _O	-0.3	17.5	V
Input Voltage	V _I	-0.3	V _{DD} +0.3	V
Operating Temp.	T _{OPR}	-20	70	°C
Storage Temp.	T _{STG}	-30	80	°C

ELECTRICAL CHARACTERISTICS (V_{DD}=5.0V, Ta=25°C)

Item	Symbol	Min.	Typ.	Max.	Unit
Input High Voltage	V _{IH}	0.8V _{DD}	-	V _{DD}	V
Input Low Voltage	V _{IL}	0	-	0.8	V
Output High Voltage	V _{OH}	2.4	-	V _{DD}	V
Output Low Voltage	V _{OL}	0	-	0.4	V
Supply Current	I _{DD}	-	6	8	mA
LCD Driving Voltage	V _{DD} -V _O	-	11	-	V

LED BACKLIGHT SPECIFICATIONS (Ta=25°C)

Item	Forward Voltage	Forward Current
YELLOW-GREEN	4.1V	210mA
White	3.1V	75mA