



PIN CONNECTIONS

Pin	Symbol	Level	Function
1	V _{DD}	+5V	Power supply for logic
2	V _{SS}	0V	GND
3	V _O	-	Operating voltage for LCD
4	DB0	H/L	Data bus line
11	DB7		
12	/CS1	L	Chip selection for IC1
13	/CS2	L	Chip selection for IC2
14	/REST	L	Reset signal ,active "L"
15	R/W	H/L	"H" Read, "L" Write
16	RS	H/L	"H" Data, "L" Instruction code
17	E	H/L	Enable signal
18	V _{OUT}	-	Out voltage for LCD driving
19	LEDK	0V	Power supply for LED backlight
20	LEDA	+5V	

NOTES:

- Built-in KS0107/0108 controller
- Yellow green/blue mode optional

MECHANICAL DATA

Item	Nominal Dimensions	Unit
Module Size (W x H x T)	75.0X54.7X12.5	mm
Viewing Area (W x H)	60.0X32.6	mm
Dot Pitch (W x H)	0.43X0.43	mm
Dot Size (W x H)	0.40X0.40	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	
Storage Temp.	T _{STG}	-30	80	

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

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	-	10.5	-	V

LED BACKLIGHT SPECIFICATIONS (Ta=25)

Item	Forward Voltage	Forward Current
YELLOW-GREEN	4.1V	120mA
White	3.1V	45mA