



FEATURES

- ◆ BUILT-IN CONTROLLER (ST7920 OR EQUIVALENT)
- ◆ +5 V POWER SUPPLY
- ◆ 1/16 DUTY CYCLE
- ◆ 8-BIT PARALLEL INTERFACE

MECHANICAL DATA

ITEM	DIMENSIONS	UNIT
Module Size (W x H x T)	93.0 x 70.0 x 8.8 (12.7 LED)	mm
Viewing Area (W x H)	72.0 x 40.0	mm
Active Area (W x H)	66.52 x 33.24	mm
Dot Size (W x H)	0.48 x 0.48	mm
Dot Pitch (W x H)	0.52 x 0.52	mm

INTERFACE PIN CONNECTIONS

NO.	SYMBOL	LEVEL	FUNCTION
1	V _{SS}	0V	Supply Ground
2	V _{DD}	5V	Supply Voltage
3	V _O	-	Contrast Adj.
4	RS	H/L	Register Select
5	R/W	H/L	Read/Write
6	E	H→L	Enable Signal
7-14	DB0-DB7	H/L	Data Bus Line
15	A	4.2V	LED Power (+)
16	K	0V	LED Power (-)
17	/RES	L	Reset Signal
18	NC	-	
19	A	4.2V	LED Power (+)
20	K	0V	LED Power (-)

ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT
Supply Voltage For Logic	V _{DD} -V _{SS}	0	-	7	V
Supply Voltage For LCD Drive	V _{DD} -V _O	0	-	12	V
Input Voltage	V _I	V _{SS}	-	V _{DD}	V

ELECTRICAL CHARACTERISTICS

ITEM	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT	
Supply Voltage For Logic	V _{DD} -V _{SS}	-	4.5	5	5.5	V	
Supply Voltage For LCD	V _{DD} -V _O	V _{DD} =5V Ta=25°C	4.4	4.8	5.2	V	
Supply Current	I _{DD}	V _{DD} =5V	-	2.5	4.5	mA	
Input Voltage	"HIGH" Level	V _{IH}	-	2.2	-	V _{DD}	V
	"LOW" Level	V _{IL}	-	-	-	0.6	V
Output Voltage	"HIGH" Level	V _{OH}	-	2.4	-	-	V
	"LOW" Level	V _{OL}	-	-	-	0.4	V