

# SG12232B ( 122 DOTS X 32 DOTS )

## FEATURES

- . BUILT-IN CONTROLLER (S6B1713 OR EQUIVALENT)
- . +5 V POWER SUPPLY
- . 1/32 DUTY CYCLE
- . 8-BIT PARALLEL INTERFACE

## MECHANICAL DATA

ITEM	DIMENSIONS	UNIT
Module Size (W x H x T)	74.0 x 28.0 x 6.5	mm
Viewing Area (W x H)	58.9 x 18.4	mm
Active Area (W x H)	54.87 x 14.37	mm
Dot Size (W x H)	0.41 x 0.41	mm
Dot Pitch (W x H)	0.45x 0.45	mm

## INTERFACE PIN CONNECTIONS

NO.	SYMBOL	LEVEL	FUNCTION
1	V <sub>SS</sub>	0V	Power Supply Ground
2	V <sub>DD</sub>	5V	Power Supply Voltage
3	V <sub>0</sub>	-	Contrast Adjustment Voltage
4	RS	H/L	H : Data, L : Instruction Code
5	R/W	H/L	H : Read / L : Write
6	E	H→L	Enable Signal
7-14	DB0-DB7	H/L	Data Bus Line
15	/CS1	L	Chip Select Signal For IC1
16	CS2	H	Chip Select Signal For IC2
17	/RET	L	Reset Signal
18	V <sub>EE</sub>	-	Power Supply Voltage For LCD
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 <sub>DD</sub> -V <sub>SS</sub>	0	-	7	V
Supply Voltage For LCD Drive	V <sub>DD</sub> -V <sub>0</sub>	0	-	17	V
Input Voltage	V <sub>I</sub>	V <sub>SS</sub>	-	V <sub>DD</sub>	V

## ELECTRICAL CHARACTERISTICS

ITEM	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT	
Supply Voltage For Logic	V <sub>DD</sub> -V <sub>SS</sub>	-	2.4	3	3.6	V	
Supply Voltage For LCD	V <sub>DD</sub> -V <sub>0</sub>	V <sub>DD</sub> =5V Ta=25.	4.4	4.8	5.2	V	
Supply Current	I <sub>DD</sub>	V <sub>DD</sub> =5V	-	2.5	4.5	mA	
Input Voltage	"HIGH" Level	V <sub>IH</sub>	-	2.2	-	V <sub>DD</sub>	V
	"LOW" Level	V <sub>IL</sub>	-	-	-	0.6	V
Output Voltage	"HIGH" Level	V <sub>OH</sub>	-	2.4	-	-	V
	"LOW" Level	V <sub>OL</sub>	-	-	-	0.4	V

## EXTERNAL DIMENSIONS

