



# SG12832D ( 128 DOTS X 32 DOTS )

## FEATURES

- ◆ BUILT-IN CONTROLLER (ST7920 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 )	59.0 x 29.3 x 12.7 LED	mm
Viewing Area ( W x H )	51.0 x 14.8	mm
Active Area ( W x H )	47.3 x 12.1	mm
Dot Size ( W x H )	0.33 x 0.34	mm
Dot Pitch ( W x H )	0.37 x 0.38	mm

## INTERFACE PIN CONNECTIONS

NO.	SYMBOL	LEVEL	FUNCTION
1	Vss	0V	Supply Ground
2	VDD	5V	Supply Voltage
3	Vo	-	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	3.2V	LED Power (+)
16	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	-	6	V
Supply Voltage For LCD Drive	V <sub>DD</sub> -V <sub>o</sub>	0	-	7	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>	-	4.5	5	5.5	V	
Supply Voltage For LCD	V <sub>DD</sub> -V <sub>o</sub>	V <sub>DD</sub> =5V Ta=25°C	4.3	4.5	4.8	V	
Supply Current	I <sub>DD</sub>	V <sub>DD</sub> =5.0V	-	2.5	4.5	mA	
Input Voltage	"HIGH" Level	V <sub>IH</sub>	-	0.7V <sub>DD</sub>	-	V <sub>DD</sub>	V
	"LOW" Level	V <sub>IL</sub>	-	-0.3	-	0.6	V
Output Voltage	"HIGH" Level	V <sub>OH</sub>	-	0.8V <sub>DD</sub>	-	V <sub>DD</sub>	V
	"LOW" Level	V <sub>OL</sub>	-	0	-	0.4	V

## EXTERNAL DIMENSIONS

