



# SG240128E ( 240 DOTS X 128 DOTS )

## FEATURES

- NO BUILT-IN CONTROLLER
- 3.3V / 5.5V POWER SUPPLY
- 1/128 DUTY CYCLE
- 4-BIT PARALLEL INTERFACE

## MECHANICAL DATA

ITEM	DIMENSIONS	UNIT
Module Size (W x H x T)	118.0 x 60.0 x 11.6	mm
Viewing Area ( W x H )	83.0 x 45.0	mm
Active Area ( W x H )	76.77 x 40.93	mm
Dot Size ( W x H )	0.29 x 0.29	mm
Dot Pitch ( W x H )	0.32 x 0.32	mm

## INTERFACE PIN CONNECTIONS

NO.	SYMBOL	LEVEL	FUNCTION
1	V <sub>DD</sub>	5V	Power Supply Voltage
2	FGND	-	Frame Ground
3	CL2	H->L	Clock Pulse For Segment Shift Register
4	/DISPOFF	H/L	Display OFF.Active LOW.
5	FLM	H	Frame Start Signal
6	CL1	H->L	Common Driver Data Shift Signal
7	V <sub>SS</sub>	0V	Power Supply Ground
8	NC	-	No Connection
9~12	DB0~DB3	H/L	Data Bus Line
14	V <sub>o</sub>	-	Contrast Adjustment Voltage
15	V <sub>SS</sub>	0V	Power Supply Ground
16	NC	-	No Connection
17	VEL	-	Power Supply Voltage For EL(+)
18	VELG	-	Power Supply Voltage For EL(-)

## 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>o</sub>	0	-	28	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>	-	2.7	5	5.5	V	
LCD Supply Voltage	V <sub>DD</sub> -V <sub>o</sub>	V <sub>DD</sub> =5V Ta=25	16.9	18	19.2	V	
Supply Current	I <sub>DD</sub>	V <sub>DD</sub> =5V	-	15	24	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	V
	"LOW" Level	V <sub>OL</sub>	-	-	-	0.4	V

## EXTERNAL DIMENSIONS

