



# SH12864B (128 DOTS X 64 DOTS)

## FEATURES

- BUILT-IN CONTROLLER (NT7532 OR EQUIVALENT)
- +3.3 V POWER SUPPLY
- 1/64 DUTY CYCLE
- 8-BIT PARALLEL INTERFACE

## MECHANICAL DATA

ITEM	DIMENSIONS	UNIT
Module Size (W x H x T)	72.0 x 46.0 x 4.8	mm
Viewing Area (W x H)	66.0 x 32.7	mm
Active Area (W x H)	61.41 x 30.69	mm
Dot Size (W x H)	0.45 x 0.45	mm
Dot Pitch (W x H)	0.48 x 0.48	mm

## INTERFACE PIN CONNECTIONS

NO.	SYMBOL	LEVEL	FUNCTION
1 ~ 5	V <sub>0</sub> ~V <sub>4</sub>	-	LCD driver supply voltage
6, 7	C <sub>2-</sub> , C <sub>2-</sub>	-	Capacitor for internal DC/DC voltage converter
8, 9	C <sub>1+</sub> , C <sub>1-</sub>	-	Capacitor for internal DC/DC voltage converter
10	C <sub>3+</sub>	-	Capacitor for internal DC/DC voltage converter
11	V <sub>out</sub>	-	Voltage converter output
12	V <sub>SS</sub>	0V	Power Supply Ground
13	V <sub>DD</sub>	3.0V	Power Supply Voltage
14 21	DB7 DB0	H/L	Data Bus line
22	/RD	L	Read Signal
23	/WR	L	Write Signal
24	A <sub>0</sub>	H/L	H : Instruction Code , L : Data Code
25	/RES	L	Reset Signal
26	/CS	L	Chip Select Signal.

## ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT
Supply Voltage For Logic	V <sub>DD</sub> -V <sub>SS</sub>	0	-	3.6	V
Supply Voltage For LCD Drive	V <sub>DD</sub> -V <sub>o</sub>	0	-	13.0	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	3.0	3.5	V	
LCD Supply Voltage	V <sub>DD</sub> -V <sub>o</sub>	V <sub>DD</sub> =3.0V Ta=25	8.1	9.6	10.1	V	
Supply Current	I <sub>DD</sub>	V <sub>DD</sub> =3.0V	-	1.2	1.5	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

