



# SH12864D (128 DOTS X 64 DOTS)

## FEATURES

- BUILT-IN CONTROLLER (ST7565 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)	40.3 x 35.0 x 4.5	mm
Viewing Area (W x H)	33.8 x 22.2	mm
Active Area (W x H)	30.705 x 19.185	mm
Dot Size (W x H)	0.225 x 0.285	mm
Dot Pitch (W x H)	0.24 x 0.30	mm

## INTERFACE PIN CONNECTIONS

NO.	SYMBOL	LEVEL	FUNCTION
1	V <sub>SS</sub>	0V	Power Supply Ground
2	V <sub>DD</sub>	3.0V	Power Supply Voltage
3	NC	-	No Connection
4	/RES	H/L	Reset Signal
5	/CS	L	Chip Signal
6	RS	H/L	Data Type Select signal
7	/WR	L	Write Signal
8	/RD	L	Read Signal
9~16	DB0~DB7	H/L	Data Bus Line
17	A	3.2V	LED Power (+)
18	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	-	5.0	V
Supply Voltage For LCD Drive	V <sub>DD</sub> -V <sub>o</sub>	0	-	18.0	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	3.3	V	
LCD Supply Voltage	V <sub>DD</sub> -V <sub>o</sub>	V <sub>DD</sub> =3.0V Ta=25	9.6	10.2	11.2	V	
Supply Current	I <sub>DD</sub>	V <sub>DD</sub> =3.0V	-	2.4	3.5	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	V
	"LOW" Level	V <sub>OL</sub>	-	-	-	0.4	V

## EXTERNAL DIMENSIONS

