



### FEATURES

- ◆ BUILT-IN CONTROLLER ( ST7565 OR EQUIVALENT)
- ◆ +3.3V POWER SUPPLY
- ◆ 1/64 DUTY CYCLE
- ◆ 8-BIT PARALLEL INTERFACE

### MECHANICAL DATA

ITEM	DIMENSIONS	UNIT
Module Size ( W x H x T )	80.0 x 54.0 x 9.7	mm
Viewing Area ( W x H )	70.7 x 38.8	mm
Active Area ( W x H )	66.52 x 33.24	mm
Dot Size ( W x H )	0.48 x 0.48	mm
Dot Pitch ( W x H )	0.54 x 0.54	mm

### INTERFACE PIN CONNECTIONS

NO.	SYMBOL	LEVEL	FUNCTION
1	V <sub>SS</sub>	0V	Power Supply Ground
2	V <sub>DD</sub>	3.3V	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	3.3V	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	-	7	V
Supply Voltage For LCD Drive	V <sub>DD</sub> -V <sub>o</sub>	0	-	30	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	3.3	4.5	V	
LCD Supply Voltage	V <sub>DD</sub> -V <sub>o</sub>	V <sub>DD</sub> =3.3V Ta=25°C	9.6	10.2	11.2	V	
Supply Current	I <sub>DD</sub>	V <sub>DD</sub> =3.3V	-	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	