



## FEATURES

- ◆ BUILT-IN CONTROLLER (SED1520 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)	84.0 x 44.0 x 8.8 ( 12.7 LED )	mm
Viewing Area ( W x H )	60.5 x 18.5	mm
Active Area ( W x H )	53.64 x 15.64	mm
Dot Size ( W x H )	0.40 x 0.45	mm
Dot Pitch ( W x H )	0.44 x 0.49	mm

## INTERFACE PIN CONNECTIONS

NO.	SYMBOL	LEVEL	FUNCTION
1	Vss	0V	Power Supply Ground
2	VDD	5V	Power Supply Voltage
3	Vo	-	Contrast Adjustment Voltage
4	Ao	H/L	Data Type Select Signal
5	E1	L	Chip Enable Signal For IC1
6	E2	L	Chip Enable Signal For IC2
7	DB0	H/L	Data Bit 0
8	DB1	H/L	Data Bit 1
9	DB2	H/L	Data Bit 2
10	DB3	H/L	Data Bit 3
11	DB4	H/L	Data Bit 4
12	DB5	H/L	Data Bit 5
13	DB6	H/L	Data Bit 6
14	DB7	H/L	Data Bit 7

## ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT
Supply Voltage For Logic	VDD-Vss	0	-	7	V
Supply Voltage For LCD Drive	VDD-Vo	0	-	12	V
Input Voltage	Vi	Vss	-	VDD	V

## ELECTRICAL CHARACTERISTICS

ITEM	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT	
Supply Voltage For Logic	VDD-Vss	-	4.5	5	5.5	V	
Supply Voltage For LCD	VDD-Vo	VDD=5V Ta=25°C	4.4	4.8	5.2	V	
Supply Current	IDD	VDD=5V	-	2.5	4.5	mA	
Input Voltage	"HIGH" Level	VIH	-	2.2	-	VDD	V
	"LOW" Level	VIL	-	-	0.6	V	
Output Voltage	"HIGH" Level	VOH	-	2.4	-	V	
	"LOW" Level	VOL	-	-	0.4	V	