



FEATURES

- ◆ BUILT-IN CONTROLLER (T6963C OR EQUIVALENT)
- ◆ +5 V POWER SUPPLY
- ◆ 1/64 DUTY CYCLE
- ◆ 8-BIT PARALLEL INTERFACE

MECHANICAL DATA

ITEM	DIMENSIONS	UNIT
Module Size (W x H x T)	180.0 x 65.0 x 9.7 (13.8 LED)	mm
Viewing Area (W x H)	134.0 x 40.4	mm
Active Area (W x H)	127.16 x 33.88	mm
Dot Size (W x H)	0.49 x 0.49	mm
Dot Pitch (W x H)	0.53 x 0.53	mm

INTERFACE PIN CONNECTIONS

NO.	SYMBOL	LEVEL	FUNCTION
1	FGND	-	For GND
2	Vss	0V	Power Supply Ground
3	VDD	5V	Power Supply Voltage
4	Vo	-	Contrast Adjustment Voltage
5	/WR	L	Read Signal
6	/RD	L	Write Signal
7	/CE	L	Enable Signal
8	C/D	H/L	H :Instruction Code , L : Data Code
9	NC	-	No Connection
10	/RST	L	Reset Signal
11~18	DB0~DB7	H/L	Data Bus Line
19	FS	H/L	H : 6*8 , L : 8*8 Select Of Columns
20	NC	-	No Connection

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	-	24	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	10.8	12.2	13.1	V	
Supply Current	IDD	VDD=5V	-	12	23	mA	
Input Voltage	"HIGH" Level	V _{IH}	-	2.2	-	VDD	V
	"LOW" Level	V _{IL}	-	-	-	0.6	V
Output Voltage	"HIGH" Level	V _{OH}	-	2.4	-	-	V
	"LOW" Level	V _{OL}	-	-	-	0.4	V