

AG240128B (240 DOTS X 128 DOTS)

FEATURES

- ◆ BUILT-IN CONTROLLER (T6963C OR EQUIVALENT)
- ◆ +5 V POWER SUPPLY
- ◆ 1/128 DUTY CYCLE
- ◆ 8-BIT PARALLEL INTERFACE
- ◆ 4.2V LED FORWARD VOLTAGE

MECHANICAL DATA

ITEM	DIMENSIONS	UNIT
Module Size (W x H x T)	144 x 104 x 10.3 (15.1 LED)	mm
Viewing Area (W x H)	114.0 x 64.0	mm
Active Area (W x H)	107.95 x 57.55	mm
Dot Size (W x H)	0.40 x 0.40	mm
Dot Pitch (W x H)	0.45 x 0.45	mm

INTERFACE PIN CONNECTIONS

NO.	SYMBOL	LEVEL	FUNCTION
1	V _{SS}	0V	Power Supply Ground
2	V _{DD}	5V	Power Supply Voltage
3	V ₀	-	Contrast Adjustment Voltage
4	C/D	H/L	H : Data, L : Instruction Code
5	/RD	L	Read
6	/WR	L	Write
7	DB0~DB7	H/L	Data Bus Line
8	/CE	L	Enable Signal
9	/RST	L	Reset Signal
10	V _{out}	-	Power Supply Voltage For LCD
11~18	MD	H/L	H : 32 / L : 40 Select Of Columns
19	FS	H/L	H : 6*8 , L : 8*8 Select Of Columns
20	NC	-	No Connection

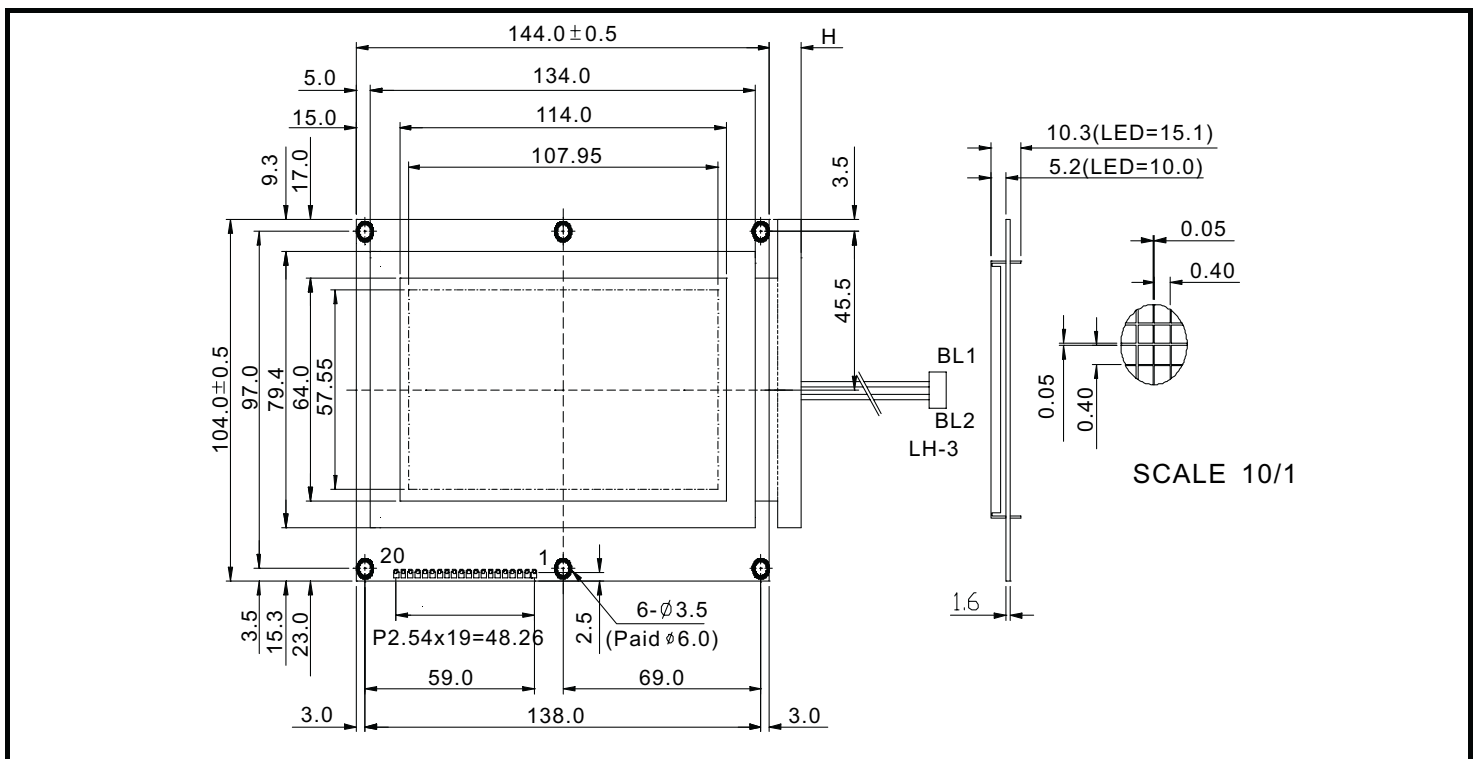
ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT
Supply Voltage For Logic	V _{DD-VSS}	0	-	7	V
Supply Voltage For LCD Drive	V _{DD-V₀}	0	-	28	V
Input Voltage	V _I	V _{SS}	-	V _{DD}	V

ELECTRICAL CHARACTERISTICS

ITEM	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Voltage For Logic	V _{DD-VSS}	-	4.5	5	5.5	V
LCD Supply Voltage	V _{DD-V₀}	V _{DD} =5V Ta=25°C	16.9	18	19.2	V
Supply Current	I _{DD}	V _{DD} =5V	-	15	24	mA
Input Voltage	"HIGH" Level	V _{IH}	-	2.2	-	V _{DD} V
	"LOW" Level	V _{IL}	-	-	-	0.6 V
Output Voltage	"HIGH" Level	V _{OH}	-	2.4	-	V
	"LOW" Level	V _{OL}	-	-	-	0.4 V

EXTERNAL DIMENSIONS

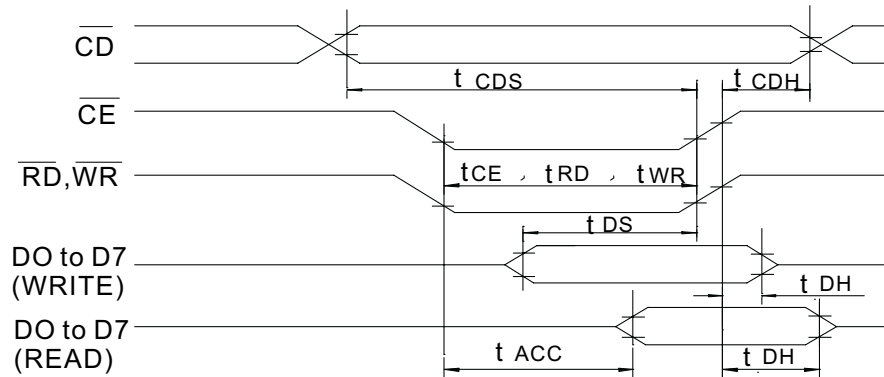


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TIMING CHARACTERISTICS

ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT.
Enable cycle time	t_{CYC}	1	-	-	us
Enable Pulse Width	H LEVEL	t_{WEH}	0.45	-	us
	L LEVEL	t_{WEL}	0.45	-	us
Enable Rise time	t_{Er}	-	-	25	ns
Enable Fall time	t_{Ef}	-	-	25	ns
Setup Time	t_{AS}	140	-	-	ns
Data Setup Time	t_{DSW}	225	-	-	ns
Data Delay Time	t_{DDR}	-	-	225	ns
Data Hold Time	t_{DHW}	10	-	-	ns
Address Hold Time	t_{AH}	10	-	-	ns
Data Hold Time	t_{DH}	20	-	-	ns

Bus Timing



BLOCK DIAGRAM

