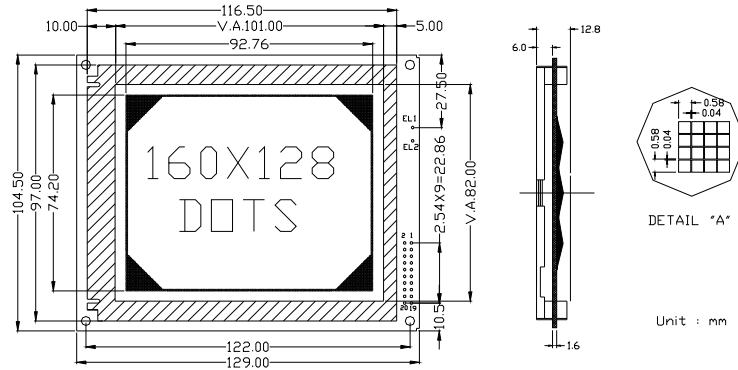


EXTERNAL DIMENSIONS AND DISPLAY PATTERN



MECHANICAL DATA (Nominal dimensions)

ITEM	SPECIFICATION	UNIT
Module Size(WxH)	129.0x104.5	mm
Viewing Area(WxH)	101.0x82.0	mm
Internal Area(WxH)	92.76x74.20	mm
Dot pitch(WxH)	0.58x0.58	mm
Dot Size(WxH)	0.54x0.54	mm
DOTS	160x128	dot

Absolute Maximum Ratings

Item	Symbol	Condition	Standard Value		unit
			min	max	
Supply Voltage for Logic	$V_{DD}-V_{SS}$	$T_a=25^{\circ}\text{C}$	0	5.25	V
Supply Voltage for LCD	$V_{DD}-V_E$		0	22	V
Input Voltage	V_I		0	V_{DD}	v

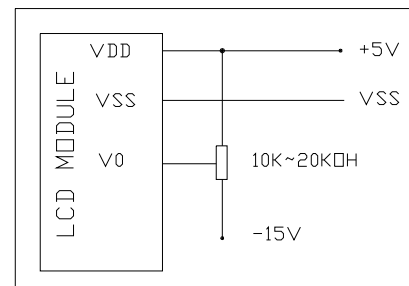
PIN CONFIGURATION

ITEM	SYMBOL	Level	DESCRIPTION
1	FG	0V	Frame ground
2	VSS	0V	Ground
3	VDD	5.0V	Power supply
4	V0	-	Operating voltage for LCD
5	/WR	L	Write signal
6	/RD	L	Read signal
7	/CE	L	Chip enable signal
8	C/D	H/L	H:Instruction L:Data code
9	NC	-	No connection
10	/RESET	L	Reset signal
11-18	DB0-DB7	H/L	Data bus
19	FS	H/L	Font selection
20	NC	-	No connection
21	EL1	-	EL Backlight
22	EL2	-	EL Backlight

ELECTRICAL CHARACTERISTICS

Power supply

Item	Symbol	Condition	Standard value			Unit
			min.	typ.	max.	
Supply Voltage for Logic	$V_{DD}-V_{SS}$	-	4.75	5.0	5.25	V
Supply Voltage for LCD	$V_{DD}-V_0$	-	0	12.0	15.0	V
Input high Voltage	V_{IH}	-	0.7 V_{DD}	-	V_{DD}	V
Input low Voltage	V_{IL}	-	0	-	0.3 V_{DD}	V
Supply Current for Logic	V_{OH}	$-I_{OH}=0.2\text{mA}$	-	8.7	-	mA
Supply Current for LCD	V_{OL}	$I_{OL}=1.2\text{mA}$	-	2.0	-	mA
With B/L	I_{EL}	$V_{DD}=5.0\text{V}$	-	80	-	mA
Drive method	1/64Duty 1/9Bias					



Block diagram

