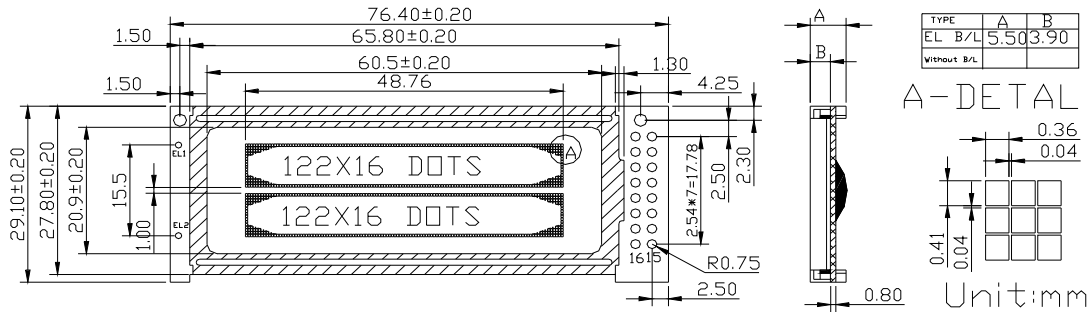




TG12232C(EL)

TINSHARP ELECTRONICS CO.LTD

EXTERNAL DIMENSIONS AND DISPLAY PATTERN



MECHANICAL DATA (Nominal dimensions)

ITEM	SPECIFICATION	UNIT
Module Size(WxH)	76. 4X29. 1	mm
Viewing Area(WxH)	60. 5X20. 9	mm
Internal Area(WxH)	48. 76X15. 32	mm
Dot pitch(WxH)	0. 40x0. 45	mm
Dot Size(WxH)	0. 36x0. 41	mm
DOTS	122x32	dot

PIN CONFIGURATION

ITEM	SYMBOL	Level	DESCRIPTION
1	VDD	+3V-5V	Power supply
2	VSS	0V	Ground
3	V ₀	-	Power supply for LCD
4	RES	H/L	Reset signal
5	E1	H/L	Read/Write enable signal (Slave)
6	E2	H/L	Read/Write enable signal (Master)
7	R/W	H/L	Read/Write select signal
8	A0	H/L	Select display data instruction
9-16	D0-D7	-	Data bus
17	EL1	-	
18	EL2	-	

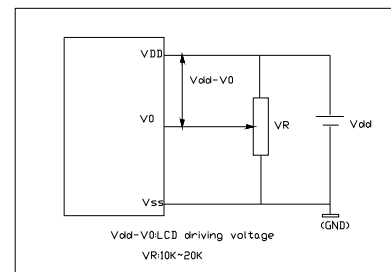
Absolute Maximum Ratings

Item	Symbol	Condition	Standard Value		unit
			min	max	
Supply Voltage for Logic	V _{DD} -V _{SS}	Ta=25°C	0	6.5	V
Supply Voltage for LCD	V _{DD} -V ₀		0	5	V
Input Voltage	V _I		V _{SS} -0.3	V _{DD} -0.3	V

ELECTRICAL CHARACTERISTICS

Item	Symbol	Condition	Standard value			Unit
			min.	typ.	max.	
Supply Voltage for Logic	V _{DD} -V _{SS}	-	4.5	5.0	5.5	V
Supply Voltage for LCD	V _{DD} -V ₀	-	4.5	5.0	5.5	v
Input high Voltage	V _{IH}	-	0.8V _{DD}	-	V _{DD}	V
Input low Voltage	V _{IL}	-	V _{SS}	-	0.2V _{DD}	V
Supply Current for Logic	V _{OH}	-I _{OH} =0.2mA	-	3	-	mA
Supply Current for LCD	V _{OL}	I _{OL} =1.2mA	-	2	-	mA
With B/L	I _{EL}	V _{DD} =5.0V	-	40	-	mA
Drive method	1/32Duty		1/6Bias			

Power supply



Block diagram

