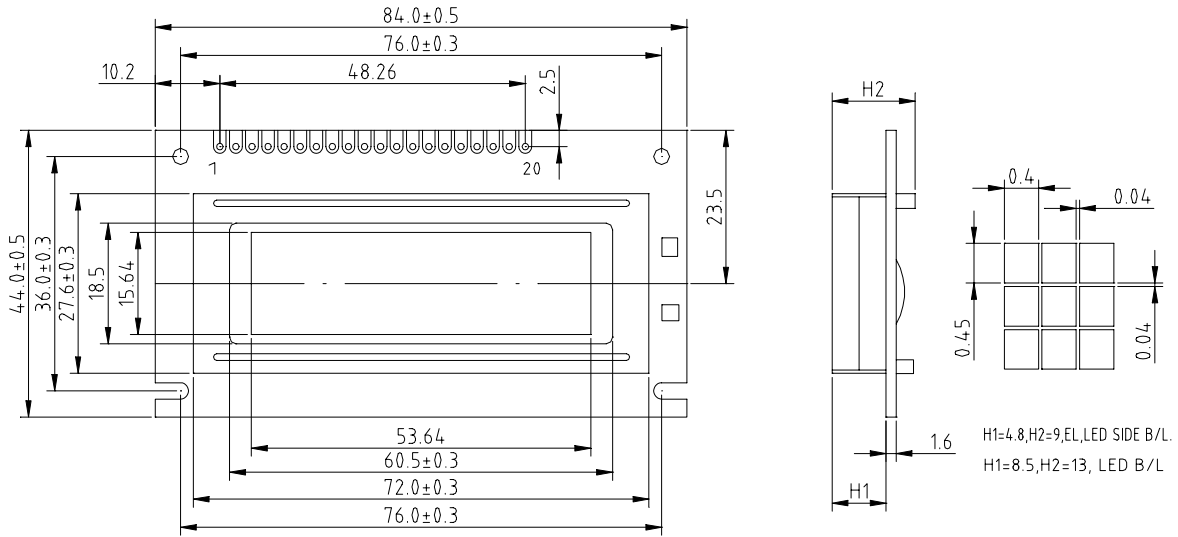


DG12232A1 (INTERNAL CLOCK)

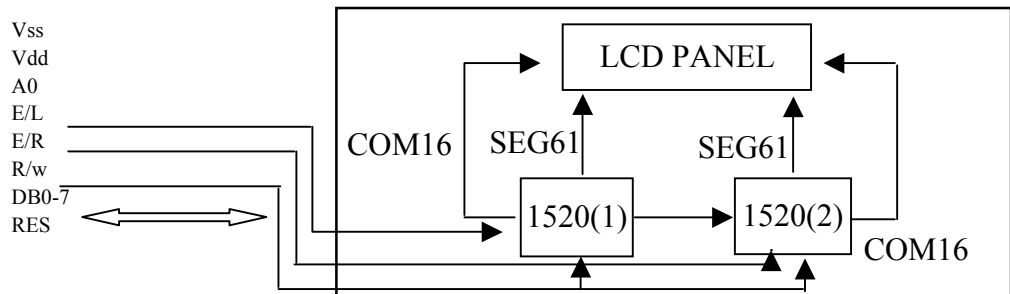
1. External Dimension



2. Pin Table

1	2	3	4	5	6	7	8	9	10	17	18	19	20
V _{SS}	V _{DD}	V _O	A ₀	NC	NC	E/L	E/R	R/W	DB ₀	DB ₇	RES	LED+	LED-

3. Block Diagram



4. Electrical Characteristics (T_a=25°C, V_{DD}=5.0V±0.25V)

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Input High Voltage	V _{ih}	-	0.8V _{DD}		V _{DD}	V
Input Low Voltage	V _{il}	-	0		0.2V _{DD}	V
Output High Voltage	V _{oh}	-I _{OH} =0.2mA	2.4			V
Output Low Voltage	V _{ol}	I _{OL} =1.2mA			0.4	V
Supply Current	I _{DD}	V _{DD} =5.0V		1.47		mA
Operating Voltage for LCD	V _{DD} -V _O	STN		5		V
		TN		5		V