

## DV series

### DV-16235 16 characters x 2 lines

#### ■ Mechanical Data

Item	Standard Value	Unit
Module Dimensions	85.0(W) X 35.0(H) X 10.0 (D)	mm
Viewing Area	62.2(W) X 17.9(H)	mm
Dot Size	0.55(W) X 0.65(H)	mm
Dot Pitch	0.60(W) X 0.70(H)	mm

#### ■ Absolute Maximum Ratings

Item	Symbol	Standard Value			Unit
		Min.	Typ.	Max.	
Supply Voltage for Logic	$V_{dd}-V_{ss}$	-0.3	--	7.0	V
Supply Voltage for LCD Drive	$V_{dd}-V_{ee}$	$V_{dd}-13.5$	--	$V_{dd}+0.3$	V
Input Voltage	$V_I$	-0.3	--	$V_{dd}+0.3$	V
Operation Temperature	$T_{opr}$	0	--	50	°C
Storage Temperature	$T_{stg}$	-20	--	70	°C

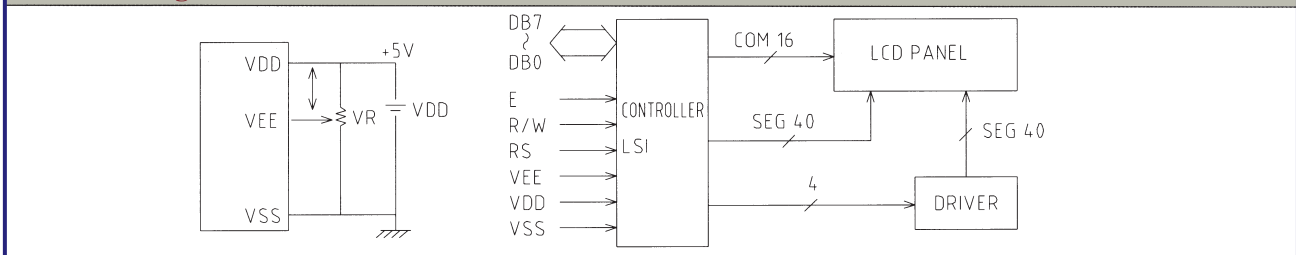
#### ■ Electrical Characteristics

Item	Symbol	Condition	Standard Value			Unit
			Min.	Typ.	Max.	
Input "High" Voltage	$V_{IH}$		2.2	--	$V_{dd}$	V
Input "Low" Voltage	$V_{IL}$	$-I_{OH}=0.205mA$	0	--	0.6	V
Output "High" Voltage	$V_{OH}$	$I_{OL}=1.2mA$	2.4	--	$V_{dd}$	V
Output "Low" Voltage	$V_{OL}$		0	--	0.4	V
Supply Current	$I_{dd}$	$V_{dd} = 5V$	--	1.8	3.0	mA

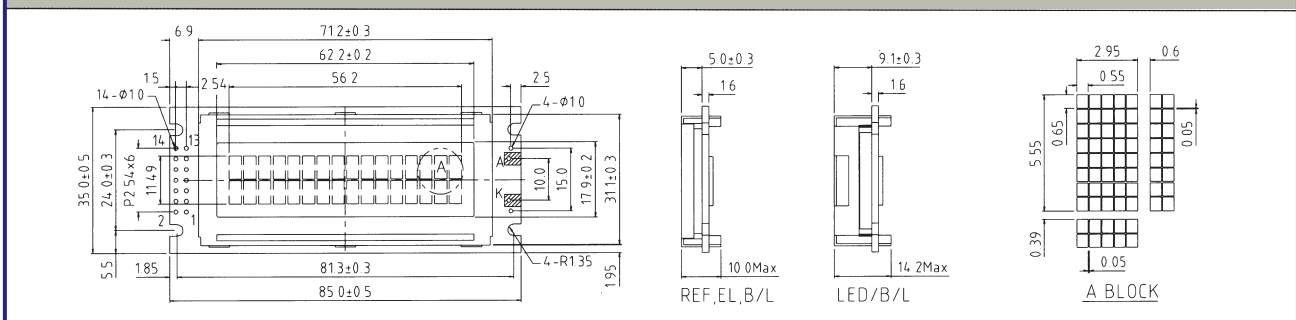
#### ■ Pin Assignment

No.	Symbol	Function	No.	Symbol	Function
1	Vdd	+5v	8	DB1	Data Bus Line
2	Vss	GND,0V	9	DB2	Data Bus Line
3	$V_{EE}$	For LCD Drive	10	DB3	Data Bus Line
4	RS	Function select	11	DB4	Data Bus Line
5	R/W	Read/Write	12	DB5	Data Bus Line
6	E	Enable signal	13	DB6	Data Bus Line
7	DB0	Data bus line	14	DB7	Data Bus Line

#### ■ Block Diagram



#### ■ External Dimensions



#### ■ Option

LCD Type								Backlight Type			Built-in Control LSI		
S1	S2	W	N	R	F	M	H	EL	LED	CCFL	Touch Panel		
•	•		•	•	•			•	•			KS-0066U or equivalent	

Remarks: S1 : yellow-green STN LCD, S2 : gray STN LCD, W : black & white LCD, N : negative type LCD, R : reflective type LCD, F : transfective type LCD, M : transmissive type LCD, H : extended temperature type LCD (-20°C ~ 70°C)