

## DV series

### DV-16120 16 characters x 1 lines

#### ■ Mechanical Data

Item	Standard Value	Unit
Module Dimensions	151.0(W) X 40.0(H) X 14.7 (D)	mm
Viewing Area	120.0(W) X 23.0(H)	mm
Dot Size	1.152(W) X 1.765(H)	mm
Dot Pitch	1.212(W) X 1.825(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

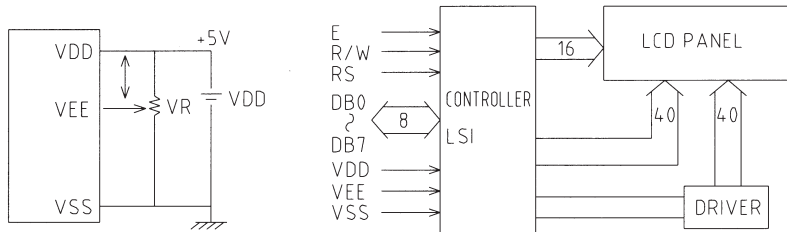
#### ■ Electrical Characteristics

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	$V_{OH}$	$I_{OL}=1.2mA$	0	--	0.4	V
Output "Low" Voltage	$V_{OL}$		--	--	0.4	V
Supply Current	$I_{dd}$	$V_{dd}=5V$	--	2.0	5.0	mA

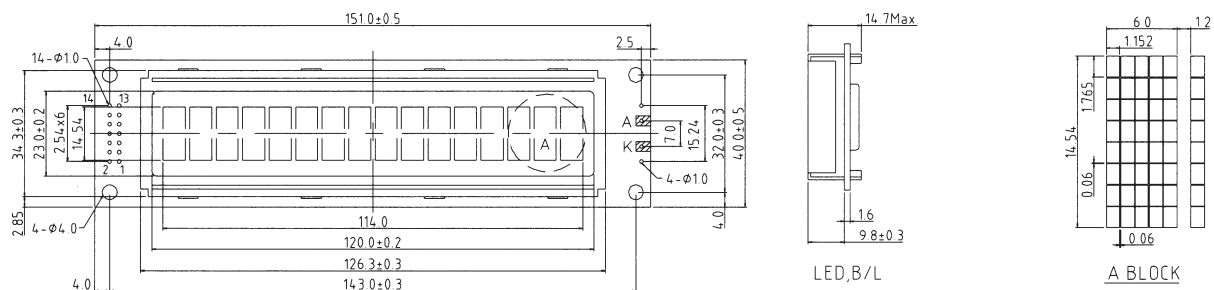
#### ■ Pin Assignment

No.	Symbol	Function	No.	Symbol	Function
1	$V_{SS}$	GND, 0V	8	DB1	Data Bus Line
2	$V_{DD}$	+5V	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)