TN/STN
Character
Liquid Crystal Display

Phoenix Display International, Inc.

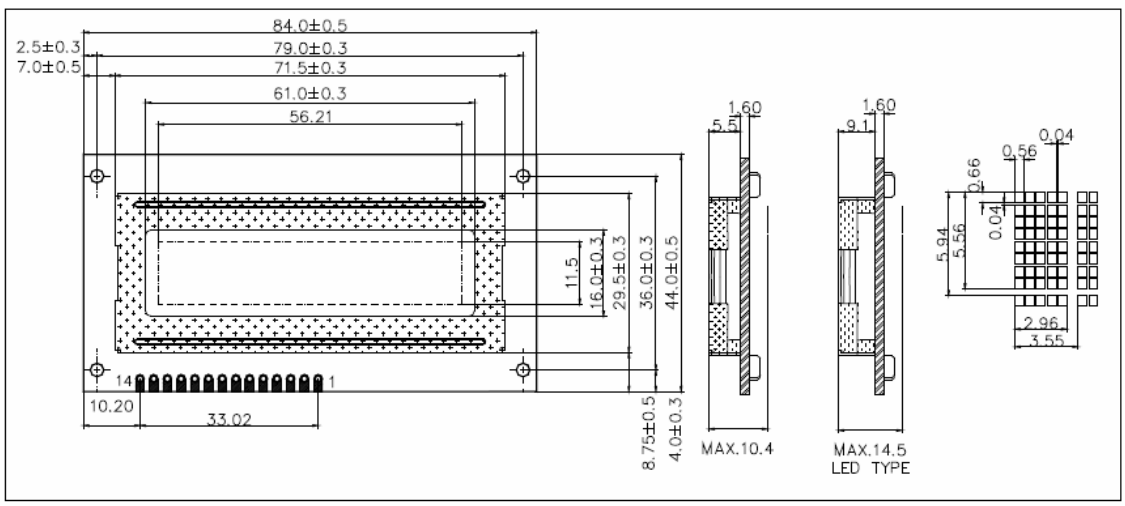
PRODUCT PREVIEW

16 Character x 2 Line

SPECIFICATIONS

MODULE	
Part Number	C-160204S-VA
Format	16 Characters x 2 Lines
Controller	KS0066
Overall Dimensions	84.0mm x 44.0mm x 10.4/14.5mm
Active Area	56.2mm x 11.5mm
Character Size	3.0mm x 5.6mm
Pixel Size	560um x 560um
Backlight System	None or LED
Driver Attach	SMT
Display Type	TN, STN, or FSTN
Duty	1/16
Bias	1/5

1.0 DIMENSIONAL DRAWING



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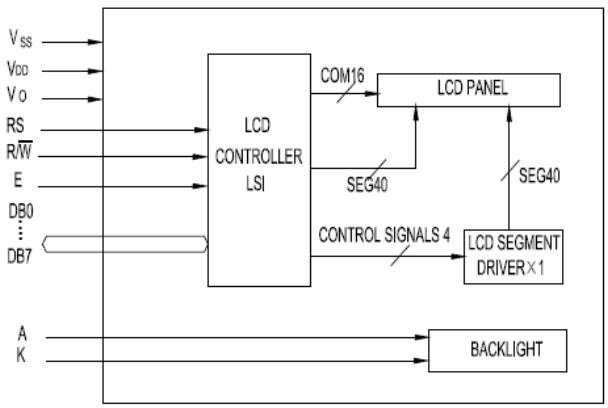
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2.0 BLOCK DIAGRAM



3.0 PIN ASSIGNMENT

Pin no.	Symbol	Function
1	V_{SS}	Power supply (GND)
2	V_{DD}	Power supply(+)
3	V_O	Contrast adjust
4	Rs	Register select signal
5	R/$\overline{W}$	Data read / write
6	E	Enable signal
7 ⋮ 14	DB0 ⋮ DB7	Data bus line

4.0 ELECTRICAL CHARACTERISTICS Ta=25 °C V_{DD}=5.0V±0.25V

Item	Symbol	Test Condition		Standard Value			
				Min.	Typ.	Max.	Unit
Power Supply Voltage	V_{DD}-V_{SS}	25°C		4.75	5.0	5.25	V
LCD Operation Voltage	V_{OP}	25°C	(STN)	-	5.0	-	V
			(TN)	-	5.0	-	V
LCM Current Consumption	I_{DD}	25°C		-	2.0	3.0	mA
Backlight Forward Voltage	V_F	25°C		-	4.2	-	V

5.0 ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Test Condition	Standard Value		
			Min.	Max.	Unit
Supply Voltage (Logic)	V_{DD}-V_{SS}	25°C	-0.3	7	V
Supply Voltage (LCD)	V_{DD}-V_O		V_{DD}-13.5	V_{DD}+0.3	V
Input Voltage	V_{IN}		-0.3	V_{DD}+0.3	V
Operating Temp.	T_{OPR}		0	50	°C
Storage Temp.	T_{STG}		-20	70	°C

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