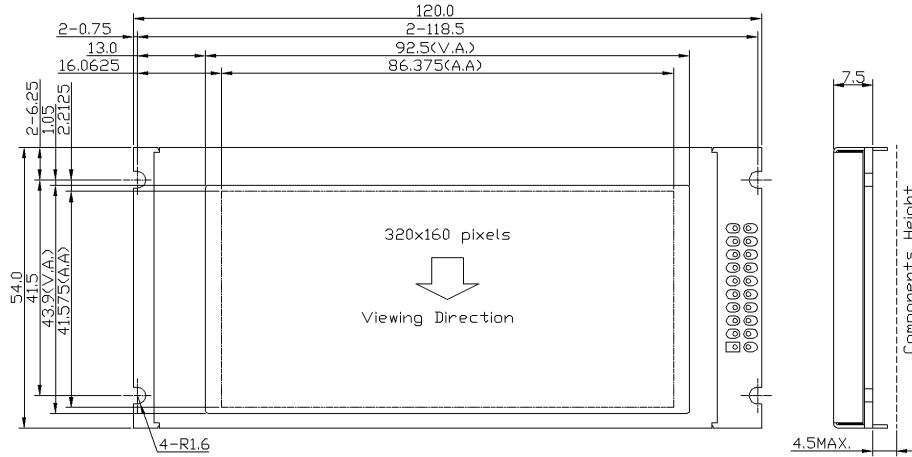


OUTLINE DRAWING



TERMINAL FUNCTIONS

Pin	Name	Descriptions
1	VSS	0V Power Supply, Ground
2	VDD	Positive Power Supply
3	V0	LCD Contrast Reference
4	/WR	Write enable input, active LOW
5	/RD	Read enable input, active LOW
6	/CS	Chip Enable Signal
7	A0	Data Type Select A0=HIGH: command write, display data or cursor add read A0=LOW: command read display data or cursor add write
8	/RES	Reset Signal /RES=L, Reset the LCD Module /RES=H, Normal Running
9	DB0	Data Bus
:	:	Three state I/O terminal for display data or instruction data
16	DB7	
17	/WAIT	Wait Signal
18	VOOUT	Power Booster Output for V0
19	BLA	LED Backlight Positive Power Supply
20	BLK	LED Backlight Negative Power Supply

DISPLAY CHARACTERISTICS

Item	Value
LCD Display Mode*	FSTN, Positive, Transflective
Viewing Angle	12:00
Driving Method	1/160 duty, 1/13 bias
Backlight#	White LED Backlight

MECHANICAL DATA

Item	Value
Outline (mm)	120.0 x 54.0 x 12.0MAX
Viewing Area (mm)	92.5 x 43.9
Active Area (mm)	86.375 x 41.575
Dot Pitch (mm)	0.26 x 0.27
Dot Size (mm)	0.235 x 0.245

ABSOLUTE MAXIMUM

Item	Symbol	Min	Max
Operating Voltage (V)	V <sub>DD</sub>	0	7.0
Operating Temperature (°C)	T <sub>OP</sub>	-20	+70
Storage Temperature (°C)	T <sub>ST</sub>	-30	+80

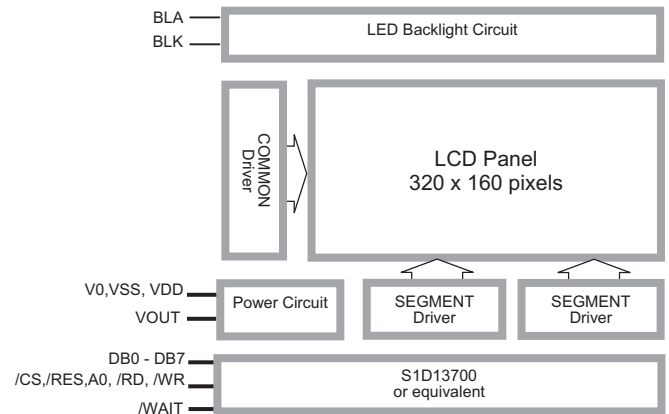
ELECTRICAL CHARACTERISTICS

Item	Symbol	Min	Typ	Max
Operating Voltage (V)	V <sub>DD</sub>	4.8	5.0	5.2
Input High Voltage (V)	V <sub>IH</sub>	3.5	-	V <sub>DD</sub>
Input Low Voltage (V)	V <sub>IL</sub>	0	-	0.4
Operating Current (mA)	I <sub>DD</sub>	-	16	60

BACKLIGHT CHARACTERISTICS

Item	Symbol	Min	Typ	Max
Forward Voltage (V)	V <sub>fBLA</sub>	-	5.0	-
Forward Current (mA)	I <sub>fBLA</sub>	-	120	150

BLOCK DIAGRAM



LM320160C series

	Highlight	
	LCD Mode	#Voltage
LM320160CCW*	FSTN-Pos	5.0V
LM320160CCW-1	FSTN-Pos	3.3V
LM320160CFW	STN-Blue	5.0V

For similar product or (semi) custom made LCD module, please visit our web site or contact us.

\*The above product information is based on this model.