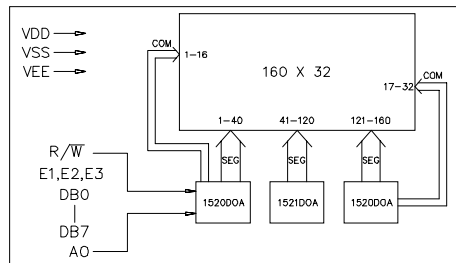
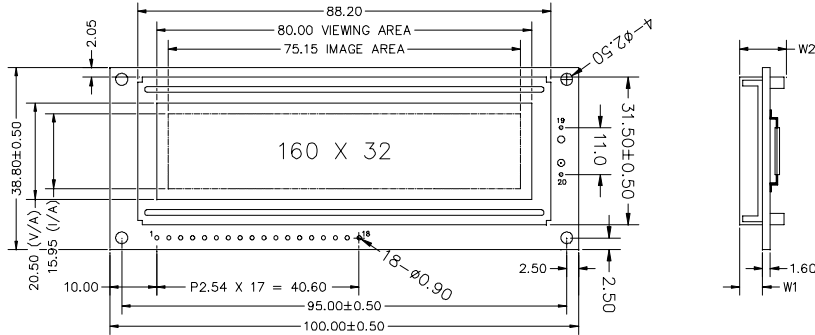


STANDARD GRAPHIC MODULES

CMG32160x01 OUTLINE DIMENSION AND BLOCK DIAGRAM

REF. NO. : CCTG0020-04



VERSION	W1	W2
NO BACKLIGHT	5.00 MAX	9.50 MAX
LED BACKLIGHT	8.00 MAX	12.50 MAX

The tolerance unless classified ± 0.3 mm

PIN ASSIGNMENT

Pin No.	Symbol	Function
1	VSS	Ground Terminal
2	VDD	Supply Terminal
3	VEE	Negative Supply Voltage
4	A0	Power Supply for LCD Driver
5	R/W	Read/Write Selection
6	E3	Enable IC U ₂
7	DB0	Data Bus Line
8	DB1	Data Bus Line
9	DB2	Data Bus Line
10	DB3	Data Bus Line
11	DB4	Data Bus Line
12	DB5	Data Bus Line
13	DB6	Data Bus Line
14	DB7	Data Bus Line
15	NC	-
16	NC	-
17	E1	Enable IC U ₁
18	E2	Enable IC U ₃
19	BL+	Led Backlight Power Supply
20	BL-	Led Backlight Ground

ABSOLUTE MAXIMUM RATING

Item	Symbol	Conditions	Min.	Max.	Unit
Power Supply Voltage	V _{dd-Vss}	-	-0.3	8	V
Operation Temperature	T _{opr}	Nor	0	50	°C
Storage Temperature	T _{stg}	Nor	-20	70	°C

ELECTRICAL CHARACTERISTIC (V_{dd} = + 5v, T_a = 25°C)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Logic Supply Voltage	V _{dd}	-	-	3	-	V
"H" Input Voltage	V _{IH}	-	2.2	-	V _{dd}	V
"L" Input Voltage	V _{IL}	-	-0.3	-	0.6	V
"H" Output Voltage	V _{OH}	-	2.4	-	-	V
"L" Output Voltage	V _{OL}	-	-	-	0.4	V
Module Supply Current	I _{dd}	-	-	1.5	2.0	mA
LCD Driving Voltage	V _{LCD}	V _{dd-V_{EE}}	-	7	-	V
Negative Supply Voltage	V _{EE}	V _{ss-V_{EE}}	-	-4	-	V

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