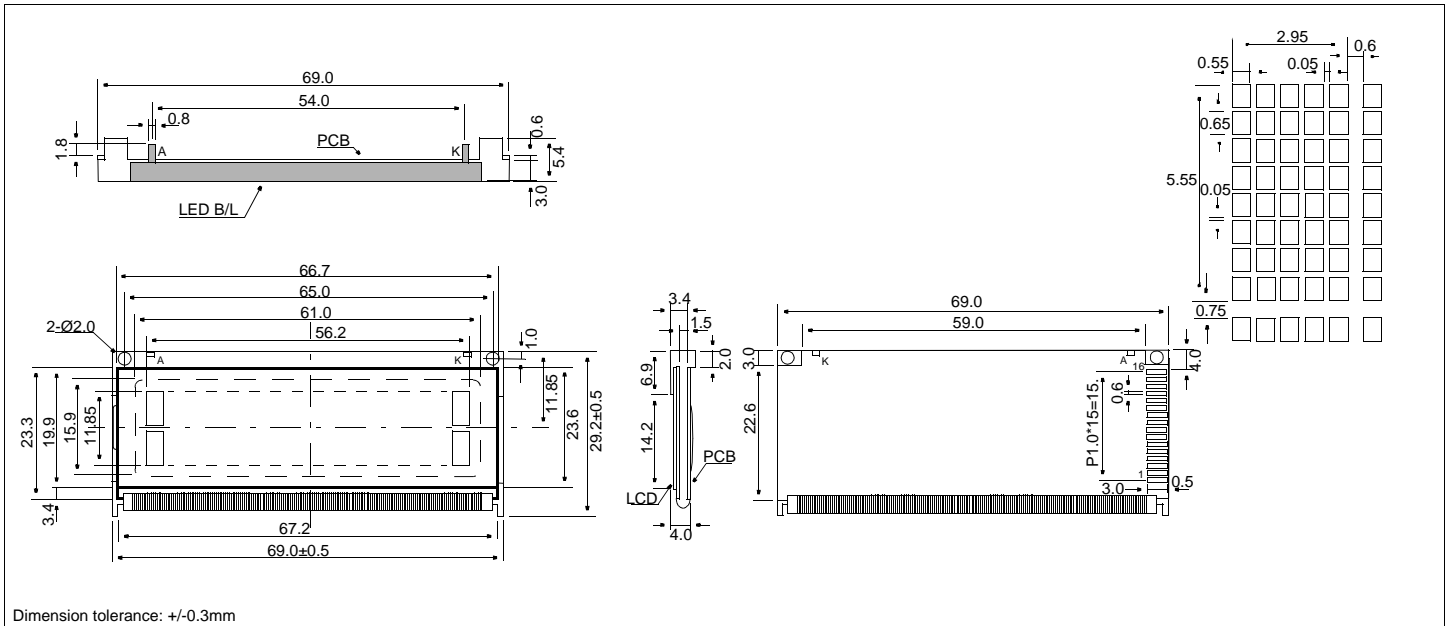


HDM16216L-T

Dimensional Drawing

16 Character x 2 Lines, Very Thin, LED Backlight



Features

Character Format5x7 Dots with Cursor
 Backlight.....LED
 Options.....Gray STN, 6 o'Clock View
 Normal/Extended Temperature
 Normal/Negative Displays

Physical Data

Module Size.....69.0W x 29.2H x 6.5T mm
 Viewing Area Size.....61.0W x 15.9H mm
 Weight.....40g

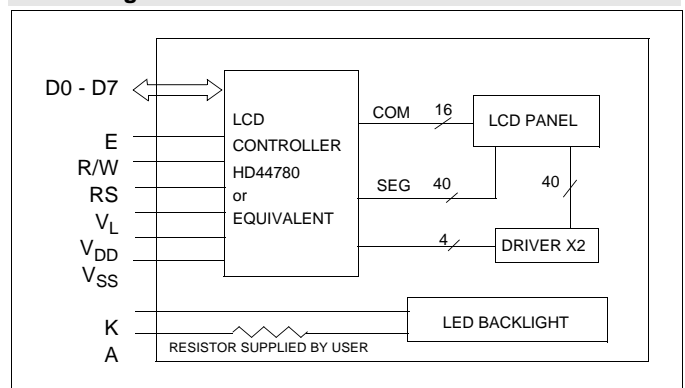
Absolute Maximum Ratings

PARAMETER	SYMBOL	MIN	MAX	UNIT
SUPPLY VOLTAGE	$V_{DD}-V_{SS}$	0	7.0	V
SUPPLY VOLTAGE FOR LCD	$V_{DD}-V_L$	-0.3	7.3	V
INPUT VOLTAGE	V_{IN}	-0.3	$V_{DD}+0.3$	V
OPERATING TEMPERATURE	T_{OP}	0	40	°C
STORAGE TEMPERATURE	T_{STG}	-20	60	°C
LED FORWARD CURRENT	I_F	-	100	mA
LED REVERSE VOLTAGE	V_R	-	8	V
LED POWER CONSUMPTION	P_D	-	500	mW

Electrical Characteristics (VDD=5.0±0.25V 25°C)

PARAMETER	SYM	CONDITION	MIN	TYP	MAX	UNIT
INPUT HIGH VOLTAGE	V_{IH}	-	2.2	-	-	V
INPUT LOW VOLTAGE	V_{IL}	-	-0.3	-	0.6	V
OUTPUT HIGH VOLTAGE	V_{OH}	$I_{OH}=0.2mA$	2.4	-	-	V
OUTPUT LOW VOLTAGE	V_{OL}	$I_{OL}=1.2mA$	-	-	0.4	V
POWER SUPPLY CURRENT	I_{DD}	$V_{DD}=5.0V$	-	1.8	-	mA
POWER SUPPLY FOR LCD	$V_{DD}-V_L$	$T_A=25^\circ C$	3.9	4.2	4.5	V
LED FORWARD VOLTAGE	V_F	$I_F=40mA$	3.9	4.2	4.5	V
BRIGHTNESS	L	$I_F=40mA$	-	4	-	cd/m ²
DRIVE METHOD	1/16 Duty					

Block Diagram



Pin Connections

PIN NO.	SYMBOL	LEVEL	FUNCTION
1	V_{SS}	-	Power supply
2	V_{DD}	-	
3	V_L	-	
4	RS	H/L	H: Data input L: Instruction data input
5	R/W	H/L	H: Data read L: Data write
6	E	H,H→L	Enable signal
7	D0	H/L	Data bus
8	D1	H/L	
9	D2	H/L	
10	D3	H/L	
11	D4	H/L	
12	D5	H/L	
13	D6	H/L	
14	D7	H/L	
15	A		Anode for LED back light
16	K		Cathode for LED back light