

# DMC-40457

40 Characters×4 Lines

Display Fonts 5×8 Dots

1/16 Duty Drive

## ABSOLUTE MAXIMUM RATINGS

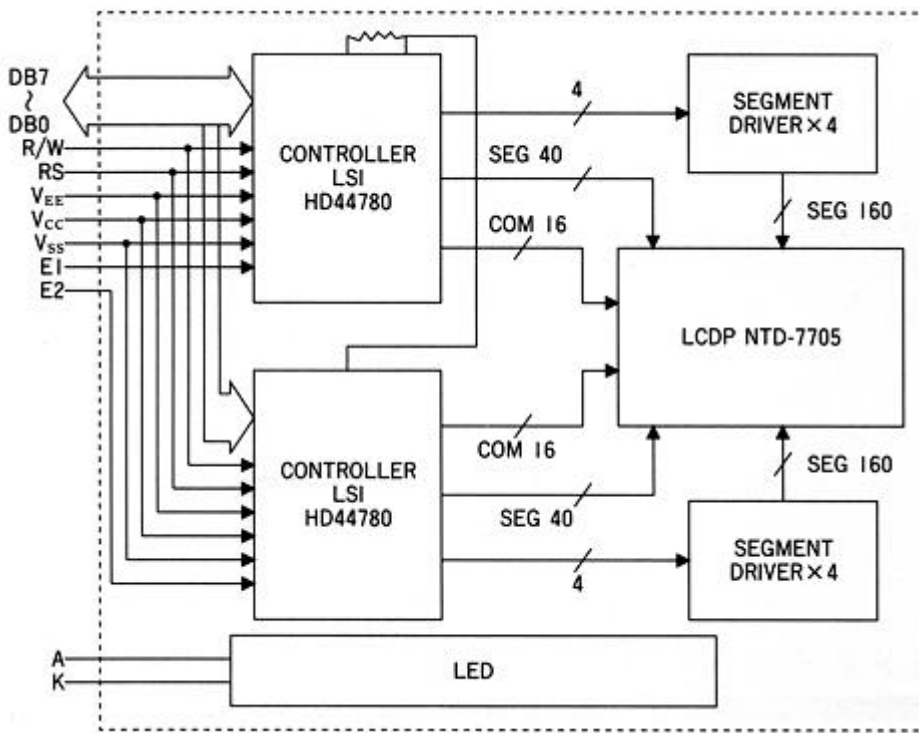
Item	Symbol	Test Condition	Standard Value		Unit
			min.	max.	
Supply Voltage for Logic	$V_{CC}-V_{SS}$	—	-0.3	7	V
Supply Voltage for LCD Drive	$V_{CC}-V_{EE}$	—	$V_{CC}-13.5$	$V_{CC}+0.3$	V
Input Voltage	$V_I$	—	-0.3	$V_{CC}+0.3$	V
LED Forward Current	$I_F$	—	—	480	mA
LED Reverse Voltage	$V_R$	—	—	8	V
LED Power Loss	$P_D$	—	—	4.1	W
Operating Temperature	$T_{opr}$	—	0	+50	°C
Storage Temperature	$T_{stg}$	—	-20	+70	°C

## ELECTRICAL CHARACTERISTICS

Item	Symbol	Test Condition	Standard Value			Unit
			min.	typ.	max.	
Input "High" Voltage	$V_{IH}$	—	2.2	—	$V_{CC}$	V
Input "Low" Voltage	$V_{IL}$	—	—	—	0.6	V
Output "High" Voltage	$V_{OH}$	$-I_{OH}=0.205mA$	2.4	—	$V_{CC}$	V
Output "Low" Voltage	$V_{OL}$	$I_{OL}=1.2mA$	—	—	0.4	V
LED Forward Voltage	$V_F$	$I_F=350mA$	3.5	3.9	4.3	V
Brightness *I	L	$I_F=350mA$	30	35	—	cd/m <sup>2</sup>
Supply Current	$I_{CC}$	$V_{CC}=5.0V$	—	4.0	10.0	mA

※ $V_{CC}=5.0V\pm5\%$ ,  $T_a=25^\circ C$  \*NOTE 1) Measured at the bare LED backlight unit.

## BLOCK DIAGRAM



PHOTO



PIN ASSIGNMENT

Pin No.	Symbol	Level	Function
1	DB7	H/L	Data Bus Line
2	DB6	H/L	
3	DB5	H/L	
4	DB4	H/L	
5	DB3	H/L	8-bit transfer.....Data Bus Line 4-bit transfer.....No Connection
6	DB2	H/L	
7	DB1	H/L	
8	DB0	H/L	
9	EI	H, H→L	Enable Signal (No pull-up resistor)
10	R/W	H/L	H:READ, L:WRITE
11	RS	H/L	Register Select Signal
12	V <sub>EE</sub>	—	Power Supply for LCD Drive
13	V <sub>SS</sub>	—	Power Supply (0V, GND)
14	V <sub>CC</sub>	—	Power Supply (+5V)
15	E2	H, H→L	Enable Signal (No pull-up resistor)
16	NC	—	No Connection
17	K	—	Power Supply for LED
18	A	—	Power Supply for LED

DIMENSION

