

# LMX78X198X

240 × 160 dots ; 1/160 duty

## ◆ Features

- Display Mode : positive STN and Normally white FSTN
- EL Backlight optional
- Wide temperature version available
- Viewing Direction : 6 or 12 o'clock ( optional )
- Anti-glare polarizer available ( optional )
- Logic voltage : 5.0 volt

## ◆ Mechanical Specification

Parameter	Unit	Dimension
Outlet Dimension	mm	76.0 x 80.0 x 9.0 max.
Display Area	mm	54.0 x 46.0
Dot Size	mm	0.17 x 0.22
Dot Pitch	mm	0.20 x 0.25

## ◆ Electronically Characteristics

Parameter	Sym.	Condition	min.	typ.	max.	Unit
Supply Current ( Logic )	IDD	VDD=5.0V	---	2.7	4.0	mA
Supply Current ( LCD )	IEE	VDD-Vo=21.0 V	---	2.5	4.0	mA
Recommended LC Driving		0°C	---	22.4	22.8	
Voltage for Normal Temp.	VDD-V0	25°C	20.6	21.0	21.4	V
Version module		50°C	18.9	19.3	---	
EL Power Supply current	IEL	VEL=100 VAC, 400Hz	---	2.5	5.0	mA

## ◆ Internal Pin Connection

(A) LCD I/O

Pin	Symbol	Level	Function
1	FRAME	---	Frame signal
2	CL1	H→L	Input data latch signal
3	M	H/L	Control Signal for AC Driving
4	DOFF	L	Display Off control
5	CL2	H→L	Data input clock signal
6-9	D0-D3	H/L	Display Data
10	NC	---	No connection
11	VDD	---	Power Supply for Logic ( +5.0 V )
12	VSS	---	Signal Ground ( GND )
13	VEE	---	LCD driving voltage
14	V0	---	LCD contrast adjust voltage
15	EL1	---	Power supply for EL B/L
16	EL2	---	Power supply for EL B/L

## ◆ Outline Dimensions

