

ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Min.	Max.	Unit
Supply Voltage(Logic)	$V_{DD} - V_{SS}$	-0.3	6.0	V
Supply Voltage(LCD)	$V_{DD} - V_O$	-0.3	30.0	V
Input Voltage	V_i	-0.3	$V_{DD} + 0.3$	V
Operating Temp.	T_{opr}	-20	70	°C
Storage Temp.	T_{stg}	-30	80	°C

MECHANICAL DATA

Item	Nominal Dimensions	Unit
Module Size (W x H x T)	139.0 x 106.0 x 13.0	mm
Viewing Area (W x H)	103.0 x 79.0	mm
Dot Pitch (W x H)	0.30 x 0.30	mm
Dot Size (W x H)	0.27 x 0.27	mm
Weight	Approx. 175	g

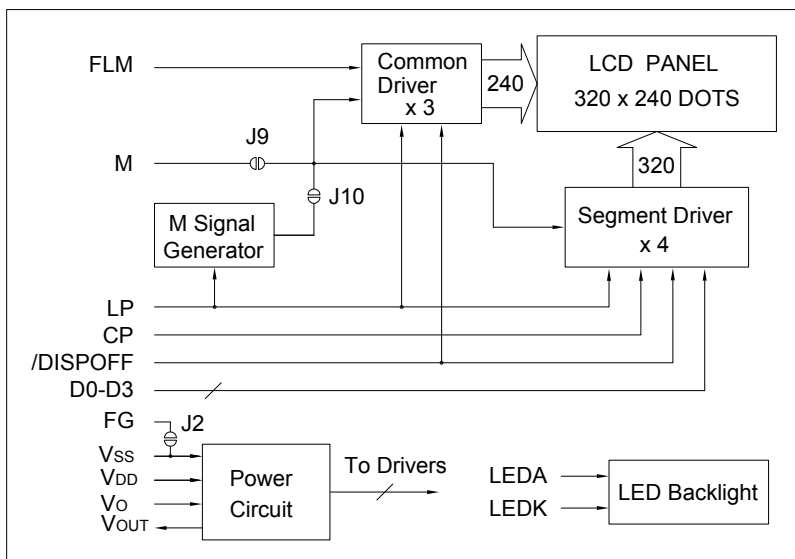
ELECTRICAL CHARACTERISTICS ($V_{DD}=3.3V$ to $5.0V$)

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Input High Voltage	V_{IH}	--	$0.8V_{DD}$	--	V_{DD}	V
Input Low Voltage	V_{IL}	--	0	--	$0.2V_{DD}$	V
Supply Current	I_{DD}	$V_{DD} = 5.0V$	--	30.0	60.0	mA
		$V_{DD} = 3.3V$	--	40.0	80.0	mA
LCD Driving Voltage	$V_{DD} - V_O$	$T_a=25^\circ C$	--	22.7	--	V

PIN CONNECTIONS (CN3/CN4/CN5)

Pin	Symbol	Level	Function
1	FLM	H	Scan start-up pulse
2	LP	H>L	Display data latch pulse
3	CP	H>L	Display data shift pulse
4	M(NC)	--	External M signal (J9 close and J10 open) or No connection (J9 open and J10 close)
5	V_O	--	Operating voltage for LCD
6	V_{DD}	3.3V-5V	Power supply for logic
7	V_{SS}	0V	GND
8	V_{OUT}	-22V	Output voltage for LCD driving
9	D0	H/L	Display data
10	D1	H/L	
11	D2	H/L	
12	D3	H/L	
13	/DISPOFF	H/L	H: display on L: display off
14	NC	--	No connection
15	LEDA	5V	Power supply for LED backlight
16	LEDK	0V	

BLOCK DIAGRAM



LED BACKLIGHT SPECIFICATIONS ($T_a=25^\circ C$)

Item	Symbol	Typ.	Max.	Unit
Forward Voltage	V_f	3.1	3.3	V
Forward Current	I_f	105	--	mA
LED Color		White		