

ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Min.	Max.	Unit
Supply Voltage(Logic)	$V_{DD} - V_{SS}$	-0.3	7.0	V
Supply Voltage(LCD)	$V_o - V_{SS}$	-0.3	13.0	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)	116.0 x 44.0 x 14.0	mm
Viewing Area (W x H)	99.0 x 24.0	mm
Dot Pitch (W x H)	0.59 x 0.60	mm
Dot Size(W x H)	0.55 x 0.56	mm
Weight	Approx. 65	g

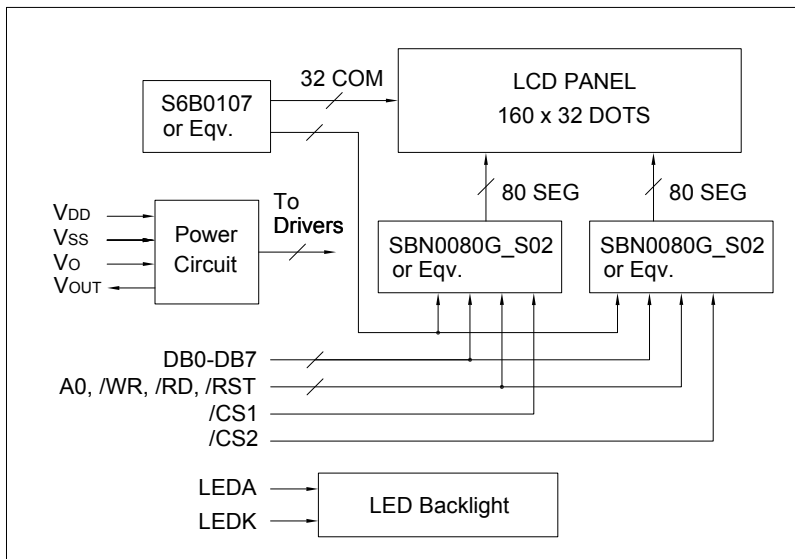
ELECTRICAL CHARACTERISTICS ($V_{DD}=5V \pm 0.25V$)

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Input High Voltage	V_{IH}	--	$0.7V_{DD}$	--	V_{DD}	V
Input Low Voltage	V_{IL}	--	0	--	$0.25V_{DD}$	V
Output High Voltage	V_{OH}	--	$V_{DD}-0.3$	--	V_{DD}	V
Output Low Voltage	V_{OL}	--	0	--	0.3	V
Supply Current	I_{DD}	$V_{DD} = 5.0V$	--	3.0	4.0	mA
LCD Driving Voltage	$V_{DD} - V_o$	$T_a=25^\circ C$	--	7.2	--	V

PIN CONNECTIONS

Pin	Symbol	Level	Function
1	A0	H/L	H : Data L : Instruction code
2	/CS2	L	Chip selection for IC2. Active "L".
3	/CS1	L	Chip selection for IC1. Active "L".
4	/RD(E)	H/L	/RD for 80 MPU, E for 68 MPU
5	/WR(R/W)	H/L	/WR for 80 MPU, R/W for 68 MPU
6	V_{DD}	+5V	Power supply for logic
7	V_{SS}	0V	GND
8	DB0	H/L	Data bus
9	DB1	H/L	
10	DB2	H/L	
11	DB3	H/L	
12	DB4	H/L	
13	DB5	H/L	
14	DB6	H/L	
15	DB7	H/L	
16	/RST	H/L	Reset. H→L:80 MPU, L→H:68 MPU
17	V_o	--	Operating voltage for LCD
18	V_{OUT}	-5V	Output voltage for LCD driving
19	LEDA	+5V	Power supply for LED backlight
20	LEDK	0V	

BLOCK DIAGRAM



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

Item	Symbol	Typ.	Max.	Unit
Forward Voltage	V_f	2.9	3.1	V
Forward Current	I_f	30	--	mA
LED Color		White		