

ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Min.	Max.	Unit
Supply Voltage(Logic)	V _{DD} - V _{SS}	-0.3	5.5	V
Supply Voltage(LCD)	V _{DD} - V _O	-0.3	25.0	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)	144.0 x 104.0 x 13.0	mm
Viewing Area (W x H)	114.0 x 64.0	mm
Dot Pitch (W x H)	0.45 x 0.45	mm
Dot Size (W x H)	0.40 x 0.40	mm
Weight	Approx. 190	g

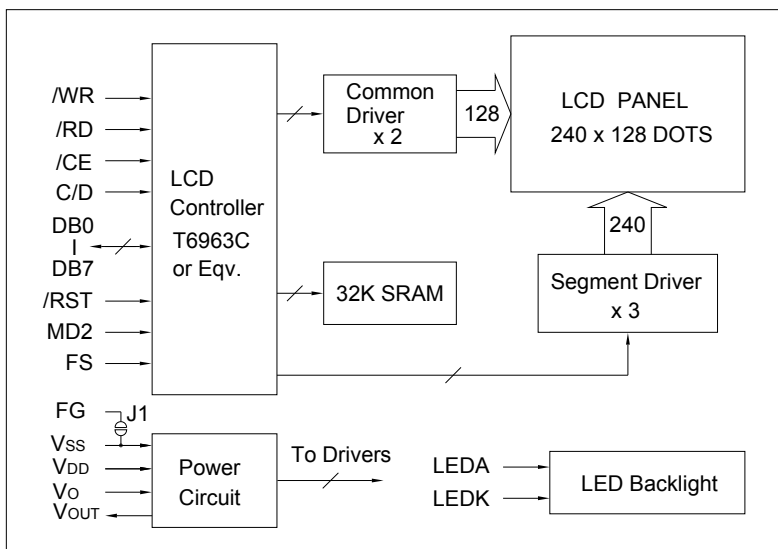
ELECTRICAL CHARACTERISTICS (V_{DD}=5V)

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Input High Voltage	V _{IH}	--	V _{DD} -2.2	--	V _{DD}	V
Input Low Voltage	V _{IL}	--	- 0.3	--	0.8	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	--	18.0	25.0	mA
LCD Driving Voltage	V _{DD} - V _O	T _a =25°C	--	18.2	--	V

PIN CONNECTIONS

Pin	Symbol	Level	Function
1	V _{SS}	0V	GND
2	V _{DD}	5V	Power supply for logic
3	V _O	--	Operating voltage for LCD
4	C/D	H/L	L : Data H : Instruction code
5	/RD	L	Read signal, active "L"
6	/WR	L	Write signal, active "L"
7	DB0	H/L	Data bus line
8	DB1	H/L	
9	DB2	H/L	
10	DB3	H/L	
11	DB4	H/L	
12	DB5	H/L	
13	DB6	H/L	
14	DB7	H/L	
15	/CE	L	Chip enable signal, active "L"
16	/RST	L	Reset signal, active "L"
17	V _{OUT}	-14V	Output voltage for LCD driving
18	MD2	H/L	Column number selection
19	FS	H/L	Font selection L: 8x8, H: 6x8
20	NC	--	No connection

BLOCK DIAGRAM



LED BACKLIGHT SPECIFICATIONS (T_a=25° C)

Item	Symbol	Typ.	Max.	Unit
Forward Voltage	V _f	2.9	3.0	V
Forward Current	I _f	105	--	mA
LED Color		White		