



GM246410

240 x 64 dots

STN

Reflective / CCFL Backlight

DIMENSIONAL DATA

Item	Measurement (W) x (H) x (T)	Unit
Module Dimension	180 x 70 x 14.0 Max.(CCFL B/L)	mm
Viewing Area	137 x 44	mm
Dot Pitch	0.53 x 0.53	mm
Dot Size	0.50 x 0.50	mm
Weight	170	g
Controller/Driver	T6963C	

ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Condition	Min.	Max.	Unit
Supply Voltage (Logic)	$V_{DD} - V_{SS}$	0		7.0	V
Supply Voltage(LCD)	$V_{DD} - V_O$	0		20.0	V
Input Voltage	V_I	$T_a = 25\text{ C}$	V_{SS}	V_{DD}	V
Operating Temp.	T_{opr}		0	50	C
Storage Temp.	T_{stg}		-20	70	C

ELECTRICAL CHARACTERISTIC

Item	Symbol	Condition	Value			Unit
			Min.	Typ.	Max.	
Supply Voltage (Logic)	$V_{DD}-V_{SS}$	--	4.5	5.0	5.5	V
Supply Voltage (LCD)	$V_{DD}-V_O$	--	--	11.5	--	V
Supply Current	I_{DD}	$V_{DD}-V_{SS}=5V$	7.8	8	8.2	mA
	I_{FE}		3.2	3.3	3.5	mA
Input Voltage "H" Level	V_{IH}	High Level	$V_{DD} \cdot 2.2$	--	V_{DD}	V
Input Voltage "L" Level	V_{IL}	Low Level	0	--	0.8	V
Frame Frequency	F_f	$T_a = 25\text{ C}$	--	70	--	Hz
Viewing Angle	1 - 2	$T_a = 25\text{ C}$	--	50	--	Deg.
	1. 2	CR 3	--	3 0	--	

PIN ASSIGNMENT

Pin	Symbol	Level	Function
1	FGND	--	Frame Ground (Connect to Bezel)
2	V_{SS}	L	Ground (0V)
3	V_{DD}	H	+5V
4	V_O	--	Power Supply for LCD Drive
5	/WR	H/L	Data Write
6	/RD	H/L	Data Read
7	/CE	H/L	Chip Enable
8	C/D	H/L	Code/Data
9	NC	--	No Connection
10	/RESET	L	Reset, Active LOW
11	DB0	H/L	Data Bus Line
12	DB1	H/L	
13	DB2	H/L	
14	DB3	H/L	
15	DB4	H/L	
16	DB5	H/L	
17	DB6	H/L	
18	DB7	H/L	
19	FS	H/L	Font Select, L=8 x 8, H=6 x 8
20	RV	H/L	Reverse, H=Positive, L=Negative

OUTLINE DIMENSION

