



\* FOR LED BACKLIGHT TH1=14.0MAX TH2=9.0MAX  
 \* FOR EL OR NO BACKLIGHT TH1=11.0MAX TH2=6.0MAX

REVISIONS

NO.	DATE	BY	DESCRIPTION
1	02/03/28	A.CH	NEW RELEASE

PINS ASSIGNMENT

NO.	SYMBOL	DESCRIPTION
1	FG	FRAME GROUND
2	VSS	GROUND
3	VDD	POWER SUPPLY FOR LOGIC AND LCD
4	V0	OPERATING VOLTAGE FOR LCD
5	/MR	DATA WRITE
6	/RD	DATA READ
7	/CE	CHIP ENABLE FOR T6963C
8	C/D	COMMAND/DATA SELECTION
9	NC	NO CONNECT
10	/RST	RESET T6963C (LOW EFFECTIVE)
11--18	DBO--DBT	DATA BUS
19	FS	FONT SELECTION (L:8X8, H:6X8)
20	VEE	ON CHIP DC/DC OUTPUT(-10V)
21	A	LED POWER SUPPLY(+)
22	NC	NO CONNECTION
23	K	LED POWER SUPPLY(-)

ABSOLUTE MAXIMUM RATING

ITEM	SYMBOL	MIN	MAX	UNIT
POWER SUPPLY(LOGIC)	VDD-VSS	0	6.5	V
POWER SUPPLY(LCD DRV.)	VDD-V0	0	18.0	V
INPUT VOLTAGE	VI	VI	VDD	V

ELECTRICAL CHARACTERISTICS

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
VOLTAGE FOR LOGIC	VDD-VSS	4.75	5.0	5.25	V
SUPPLY CURRENT	IDD	-	8.7	-	mA
LCD OPERATING VOLTAGE	VDD-V0	-	12.5	-	V
	25C	-	11.5	-	V
	40C	-	10.5	-	V
INPUT VOLTAGE	VI	0.7VDD	-	VDD	V
	VH	0	-	0.3VDD	V
	VL	0	-	0.3VDD	V

MECHANICAL SPECIFICATIONS

ITEM	SPECIFICATION	UNIT
OVERALL SIZE	180.0W x 65.0H x 14.0T(11.0T)	MM
VIEWING AREA	132.0W x 39.0H	MM
DOT NUMBER	240 x 64	DOTS
DOT SIZE	0.49W x 0.49H	MM
DOT PITCH	0.53W x 0.53H	MM

OPTIONS

1. LOD TYPE: Y/G STN; GRAY STN; B/W FSTN
2. BACKLIGHT: WITHOUT BACKLIGHT; LED; EL
3. COLOR OF BACKLIGHT: Y/G; BLUE; WHITE
4. TEMPERATURE RANGE: NORMAL(0--50C); EXTENDED(-20--70C)
5. POWER SUPPLY: ON BOARD DC/DC(SINGLE 5.0V); DUAL POWER SUPPLY(5.0V & -10.0V)
6. VIEWING ANGLE: 6H; 12H

NT-G240641B

240 X 64 DOTS GRAPHIC LCM



ALL DIMENSIONS ARE IN MM. TOLERANCE IS +/-0.2 UNLESS OTHERWISE NOTED.



NELY, YOUR SUPPLIER, AND YOUR PARTNER!