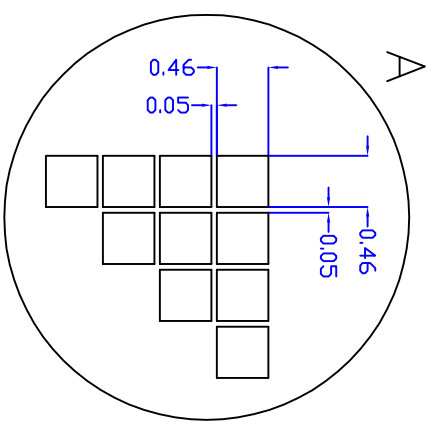


* SEGMENT DRIVER:
KS0108 OR EQUIV.
* COMMON DRIVER
KS0107 OR EQUIV.

* FOR LED BACKLIGHT
T1=14.0MAX T2=9.0±0.3
* FOR EL OR NO BACKLIGHT
T1=11.0MAX T2=6.0±0.3



PINS ASSIGNMENT	
NO.	SYMBOL DESCRIPTION
1	VSS GROUND
2	VDD POWER SUPPLY FOR LOGIC AND LCD
3	V0 OPERATING VOLTAGE FOR LCD
4	VEE NEGATIVE VOLTAGE OUTPUT/INPUT(-10V)
5	RS DATA/INSTRUCTION SELECT
6	R/W READ/WRITE SELECT
7	E ENABLE SIGNAL
8--15	DB0--DB7 DATA BUS
16	/CS1 CHIP SELECT OF IC1 (LOW EFFECTIVE)
17	/CS2 CHIP SELECT OF IC2 (LOW EFFECTIVE)
18	/CS3 CHIP SELECT OF IC3 (LOW EFFECTIVE)
19	/RST RESET SIGNAL(LOW EFFECTIVE)
20	A POWER SUPPLY FOR LED B.L.(+)
21	K POWER SUPPLY FOR LED B.L.(-)

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	-	5.1	9.8 mA
	ICG	-	9.2	- V
LCD OPERATING VOLTAGE	VDD-V0	-	9.0	- V
	V0	-	8.8	- V
INPUT VOLTAGE	VI	0.7VDD	-	VDD V
	VIL	0	-	0.3VDD V

MECHANICAL SPECIFICATIONS		
ITEM	SPECIFICATION	UNIT
OVERALL SIZE	120.0W x 62.0H x 14.0T(0.0T)	MM
VIEWING AREA	104.0W x 39.0H	MM
DOT NUMBER	192 x 64	DOTS
DOT SIZE	0.46W x 0.46H	MM
DOT PITCH	0.51W x 0.51H	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-G192643A

192 X 64 DOTS GRAPHIC LCM



NELY, YOUR SUPPLIER, AND YOUR PARTNER!

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

REVISIONS		
NO.	DATE	DESCRIPTION
1	04/07/26	NEW RELEASE