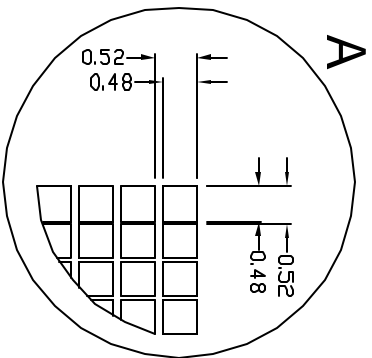


* SEGMENT DRIVER:
KS0108 OR EQUIV.
* COMMON DRIVER:
KS0107 OR EQUIV.



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

NT-G128643A

128 X 64 DOTS GRAPHIC LCM



NELY, YOUR SUPPLIER, AND YOUR PARTNER!

REVISIONS			
NO.	DATE	BY	DESCRIPTION
1	01/06/18	A/C	NEW RELEASE

PINS ASSIGNMENT	
NO.	SYMBOL DESCRIPTION
1	VSS GROUND
2	VDD POWER SUPPLY FOR LOGIC AND LCD
3	V0 OPERATING VOLTAGE FOR LCD
4	RS DATA/INSTRUCTION SELECT
5	R/W READ/WRITE SELECT
6	E ENABLE SIGNAL
7-14	DB0-DB7 DATA BUS
15	CS1 CHIP SELECT OF IC1 (HIGH EFFECTIVE)
16	CS2 CHIP SELECT OF IC2 (HIGH EFFECTIVE)
17	/RST RESET SIGNAL (LOW EFFECTIVE)
18	VEE ON CHIP DC/DC OUTPUT (-10V)
19	A POWER SUPPLY FOR LED BACKLIGHT (+)
20	K POWER SUPPLY FOR LED BACKLIGHT (-)

ABSOLUTE MAXIMUM RATING			
ITEM	SYMBOL	MIN	MAX
POWER SUPPLY (LOGIC)	VDD-VSS	0	6.5
POWER SUPPLY (LCD DRV.)	VDD-V0	0	1.80
INPUT VOLTAGE	V _I	V _I	V _D

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
LCD OPERATING VOLTAGE	VDD-V0	9.2	9.2	9.2	V
INPUT VOLTAGE	V _I	0	0.7VDD	-	V
	V _{IL}	0	-	0.3VDD	V

MECHANICAL SPECIFICATIONS		
ITEM	SPECIFICATION	UNIT
OVERALL SIZE	113.0W x 65.0H x 13.0T	MM
VIEWING AREA	73.5W x 39.0H	MM
DOT NUMBER	128 X 64	DOTS
DOT SIZE	0.48W x 0.48H	MM
DOT PITCH	0.52W x 0.52H	MM

OPTIONS	
1. LCD TYPE:	Y/G STN.; GRAY STN.; BW-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 & -5.0V)
6. VIEWING ANGLE:	6H; 12H

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

