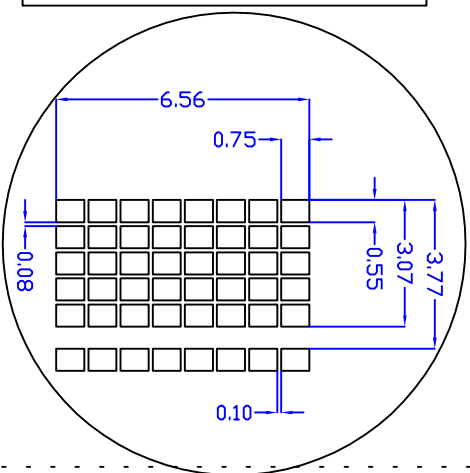
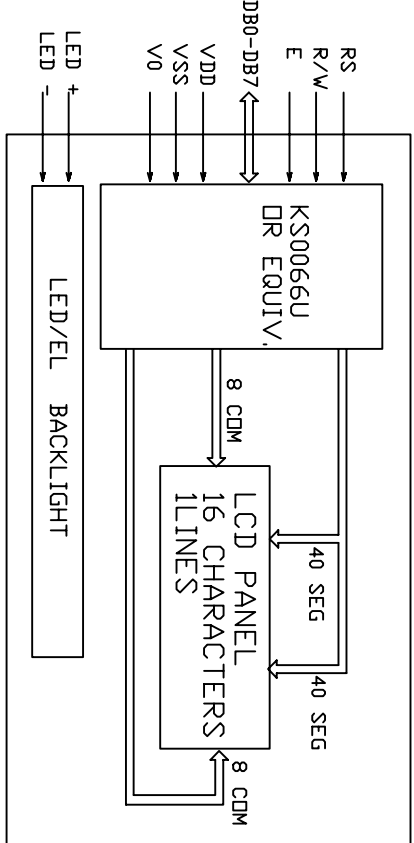


\* FOR LED BACKLIGHT  
 T1=14.0MAX T2=9.0±0.3  
 \* FOR EL OR NO BACKLIGHT  
 T1=10.0MAX T2=5.0±0.3



NT-C1613A

16 CHARACTERS X 1 LINE



NELY, YOUR SUPPLIER, AND YOUR PARTNER!

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

REVISIONS

NO.	DATE	BY	DESCRIPTION
1	09/05/12	GF,ZH	NEW RELEASE

PINS ASSIGNMENT

NO.	SYMBOL	DESCRIPTION
1	VSS	POWER SUPPLY
2	VDD	POWER SUPPLY
3	V0	OPERATING VOLTAGE FOR LCD
4	RS	DATA/INSTRUCTION SELECT
5	R/W	READ/WRITE CONTROL
6	E	ENABLE SIGNAL
7-14	DB0-DB7	DATA BUS
15	LED +	POWER SUPPLY FOR LED BACKLIGHT (+)
16	LED -	POWER SUPPLY FOR LED BACKLIGHT (-)

ABSOLUTE MAXIMUM RATING

ITEM	SYMBOL	MIN	MAX	UNIT
POWER SUPPLY (LOGIC)	VDD-VSS	-0.3	7.0	V
POWER SUPPLY (LCD DRV.)	VDD-V0	-0.3	13.5	V
INPUT VOLTAGE	VI	-0.3	VDD	V

ELECTRICAL CHARACTERISTICS (VDD=5.0±0.25V, 25°C)

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
VOLTAGE FOR LOGIC	VDD-VSS	4.75	5.0	5.25	V
SUPPLY CURRENT	IDD	-	1.0	1.2	mA
VOLTAGE FOR LCD	VDD-V0	-	4.6	-	V
INPUT VOLTAGE	L	2.2	-	VDD	V
	H	VIH	-	-	V
	L	VIL	-0.3	-	V
OUTPUT VOLTAGE	H	VOH	2.4	-	V
	L	VOL	-	0.4	V

MECHANICAL SPECIFICATIONS

ITEM	SPECIFICATION	UNIT
OVERALL SIZE	80.0W x 36.0H x 14.0T(±0.0T)	MM
VIEWING AREA	64.5W x 14.4H	MM
CHARACTERS	16 CHARACTERS x 1 LINES	MM
CHARACTER SIZE	3.07W x 6.56H	MM
CHARACTER PITCH	3.70W x 6.56H	MM

OPTIONS

1. LCD TYPE:	Y/G STN, GRAY STN, TN
2. BACKLIGHT:	WITHOUT BACKLIGHT, LED, EL
3. COLOR OF BACKLIGHT:	Y/G, BLUE, WHITE
4. TEMPERATURE RANGE:	NORMAL(0--50°C) EXTENDED(-20--70°C)
5. POWER SUPPLY:	5.0V, 3.0V
6. VIEWING ANGLE:	6H, 12H
7. CHARACTER TABLE:	JAPANESE, EUROPEAN, CYRILLIC