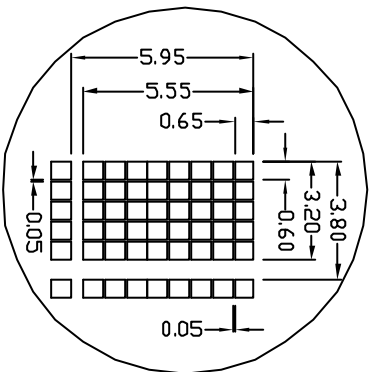
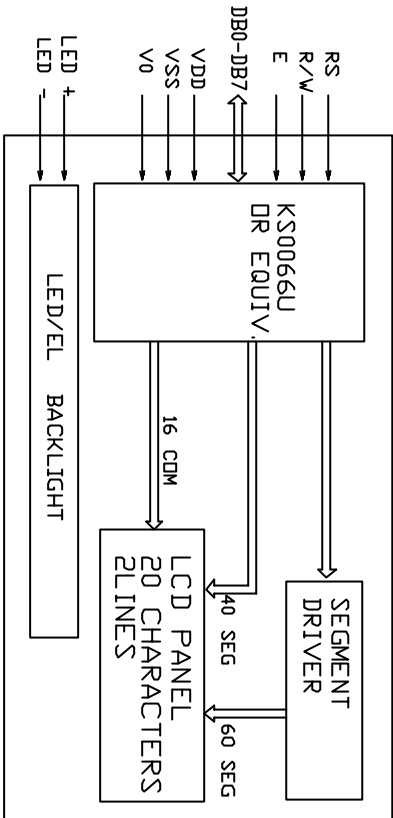


\* FOR LED BACKLIGHT  
 T1=14.0MAX T2=9.0±0.3  
 \* FOR EL DR ND BACKLIGHT  
 T1=10.0MAX T2=5.0±0.3



NT-C2021A

20 CHARACTERS X 2 LINES

NELY, YOUR SUPPLIER AND YOUR PARTNER!



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



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

PINS ASSIGNMENT			
NO.	SYMBOL	DESCRIPTION	
1	VSS	POWER SUPPLY	
2	VDD	POWER SUPPLY	
3	V0	OPERATING VOLTAGE FOR LED	
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
POWER SUPPLY(VDDIC)	VDD-VSS	-0.3	7.0
POWER SUPPLY(VCD DRV.)	VDD-V0	-0.3	13.5
INPUT VOLTAGE	VI	-0.3	VDD

ELECTRICAL CHARACTERISTICS (VDD=5.0±0.25V, 25°C)				
ITEM	SYMBOL	MIN	TYP	MAX
VOLTAGE FOR LOGIC(VDD-VSS)		4.75	5.0	5.25
SUPPLY CURRENT IDD		-	1.0	2.2
VOLTAGE FOR LCD (VDD-V0)		4.6	-	-
INPUT VOLTAGE	H VH	2.2	-	VDD
	L VIL	-0.3	-	0.6
OUTPUT VOLTAGE	H VOH	2.4	-	-
	L VOL	-	-	0.4

MECHANICAL SPECIFICATIONS		
ITEM	SPECIFICATION	UNIT
OVERALL SIZE	116.0W x 37.0H x 14.0T(10.0T)	MM
VIEWING AREA	83.0W x 18.6H	MM
CHARACTERS	20 CHARACTERS x 2 LINES	MM
CHARACTER SIZE	3.20W x 5.55H	MM
CHARACTER PITCH	3.80W x 5.95H	MM

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