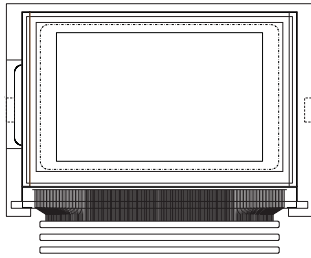


# 128 x 64 Dots Graphic LCD



## FEATURES

- Built-in controller (KS0713)
- + 3V or +5V power supply
- 1/64 duty cycle

MECHANICAL DATA		
ITEM	STANDARD VALUE	UNIT
Module Dimension	35.0 x 24.22	mm
Viewing Area	29.58 x 17.98	mm
Dot Size	0.18 x 0.23	mm
Dot Pitch	0.2 x 0.25	mm

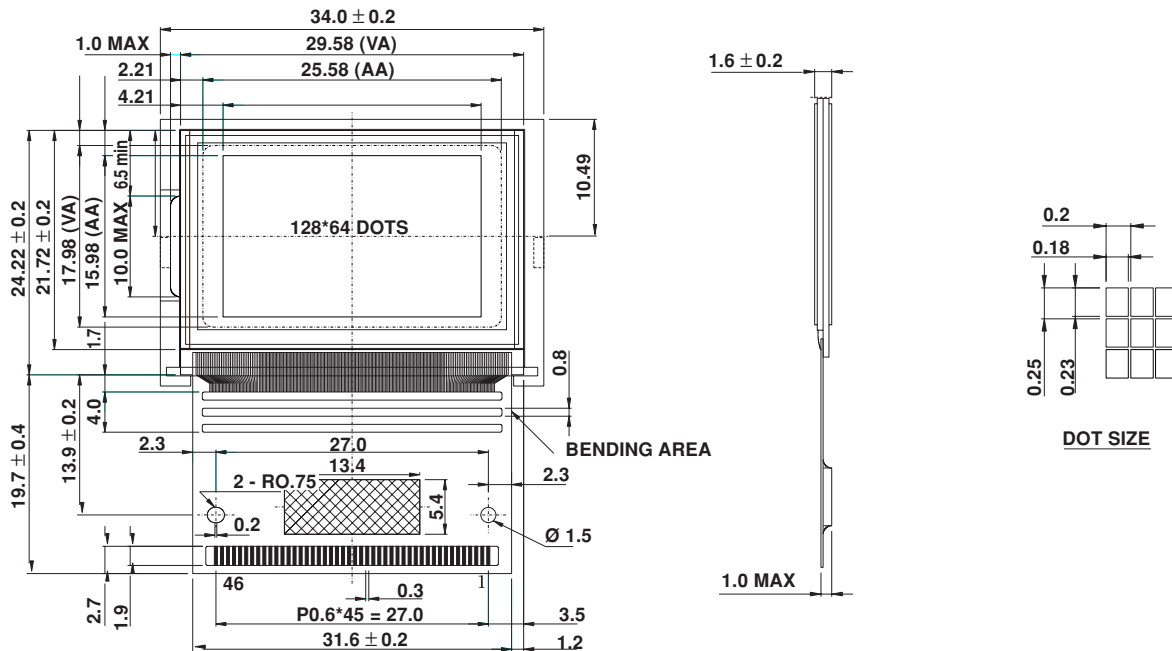
ABSOLUTE MAXIMUM RATING					
ITEM	SYMBOL	STANDARD VALUE			UNIT
		MIN.	TYP.	MAX.	
Power Supply	VDD-VSS	2.4	–	5.5	V
Input Voltage	VI	- 0.3	–	VDD	V

**NOTE:** VSS = 0 Volt, VDD = 5.0 Volt

ELECTRICAL SPECIFICATIONS						
ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT
			MIN.	TYP.	MAX.	
Input Voltage	VDD	L level	$0.8V_{DD}$	–	$V_{DD}$	V
	VIO	H level	–	–	–	V
Supply Current	IDD	VDD = 5V	–	–	–	mA
Recommended LC Driving Voltage for Normal Temp. Version Module	VDD-V0	0°C	9.3	9.8	10.3	V
		25°C	7.9	8.4	8.9	
		50°C	7.0	7.5	8.0	
LED Forward Voltage	VF	25°C	–	–	–	V
LED Forward Current	IF	25°C	–	–	–	mA
EL Power Supply Current	IEL	Vel =110VAC;400Hz	–	–	–	mA

PIN NUMBER	SYMBOL	PIN NUMBER	SYMBOL
1	NC	24	CLS
2	TEMPS	25	MS
3	INTRS	26	DUTY 1
4	HPM	27	DUTY 0
5	DCDC5B	28	DB7
6	BSTS	29	DB6
7	V4	30	DB5
8	V3	31	DB4
9	V2	32	DB3
10	V1	33	DB2
11	V0	34	DB1
12	VR	35	DB0
13	C2 -	36	E_RD
14	C2 +	37	RW_WR
15	C1 -	38	RS
16	C1 +	39	RESETB
17	C3 -	40	CS2
18	C3 +	41	CS1B
19	Vout	42	DISP
20	Vdd	43	CL
21	Vss	44	M
22	PS	45	FRS
23	MI	46	NC

## DIMENSIONS in millimeters





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