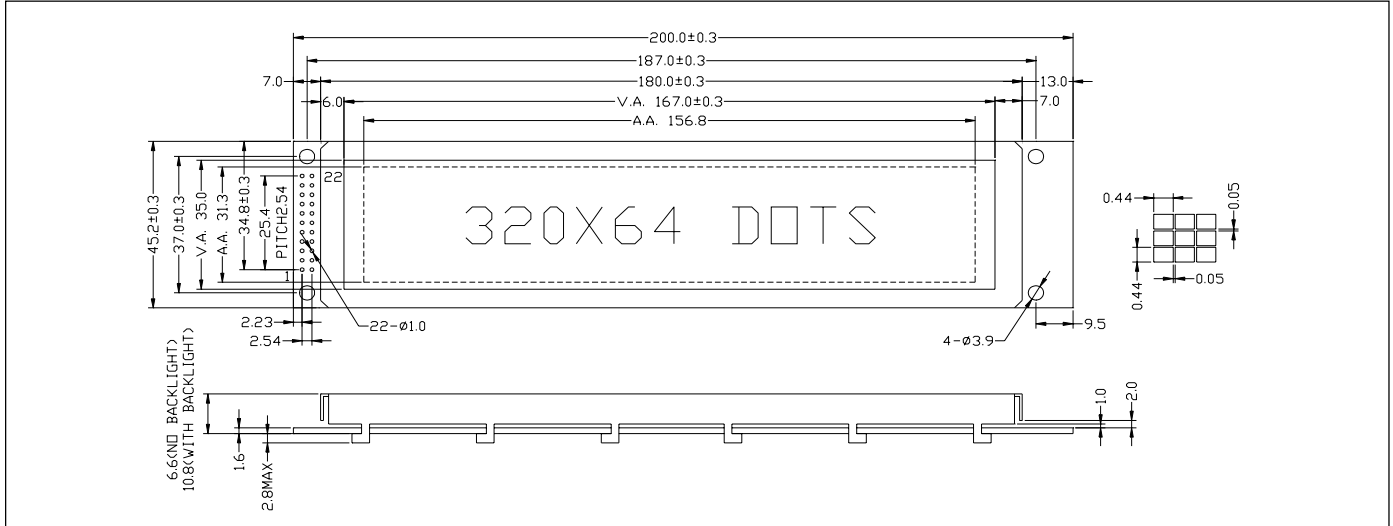




JM32064A

320DOTS×64DOTS
1/64 DUTY,1/9 BIAS

1 EXTERNAL DIMENSION



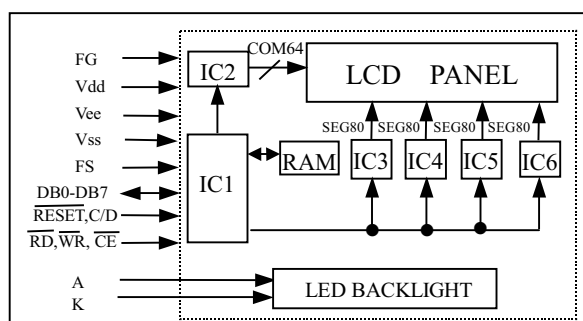
2 MECHANICAL DATA

ITEM	SPECIFICATION	UNIT
Module Size (W×H×T)	200.0×45.2×9.4(LED:13.6)	mm
Viewing Area (W×H)	167.0×35.0	mm
Number of Dots(W×H)	320×64	dots
Dot Pitch (W×H)	0.49×0.49	mm
Dot Size(W×H)	0.44×0.44	mm

3 PIN CONNECTIONS

PIN	SYMBOL	SIGNAL DESCRIPTION
1	FG	Frame GND
2	Vss	GND
3	Vdd	Power Supply
4	Vee	Power Supply for LCD
5	WR	Write when "L"
6	RD	Read when "L"
7	CE	Enable when "L"
8	C/D	Register select (L=data H=instruction)
9	NC	No connection
10	RESET	Reset when "L"
11 to 18	DB0 to DB7	Data Bus for 8bit Mode
19	FS	Select character style 6X8 or 8X8
20	NC	No connection
21	A	Anode of LED Unit
22	K	Cathode of LED Unit

4 BLOCK DIAGRAM



5 ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	MIN.	MAX.	UNIT
Supply Voltage	Vdd	-0.3	7.0	V
LCD Supply Voltage	Vee	Vdd-28	Vdd-8	V
Input Voltage	Vr	-0.3	Vdd+0.3	V
Operating Temperature	Top	0	50	°C
Storage Temperature	Tstg	-20	70	°C

6 ELECTRICAL CHARACTERISTICS(Ta=25°C)

ITEM	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Voltage(logic)	Vdd-Vss	-	4.5	5.0	5.5	V
Supply Current(logic)	Idd	Vdd=5.0	-	8.6	-	mA
Driving Current(LCD)	Iee	Vee=-7.8	-	4.0	-	mA
Driving Voltage(LCD)	Vdd-Vee	25°C	-	12.8	-	V
Input Voltage "H"	V _{IH}	H	Vdd-2.2	-	Vdd	V
Input Voltage "L"	V _{IL}	L	0	-	0.8	V
Output Voltage "H"	V _{OH}	H	Vdd-0.3	-	Vdd	V
Output Voltage "L"	V _{OL}	L	0	-	0.3	V

7 BOTTOM BACKLIGHT CHARACTERS(Ta=25°C)

PARAMETER	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Voltage	V _{LED}	-	-	4.1	-	V
LED Forward Consumption Current	I _f	Ta=25°C V _f =4.1V	-	550	-	mA
LED Allowable Dissipation	P _d	-	-	2300	-	mW