

## JM 161 A

## LCD- Standard Charaktermodul



### Hauptmerkmale

- 16 Charakter / 1 Zeile
- Ziffernhöhe 6.56 mm
- Single Supply +5Volt
- STN-Technologie
- Einstellbarer Kontrast
- Option LED / EL- Beleuchtung

### PIN Belegung

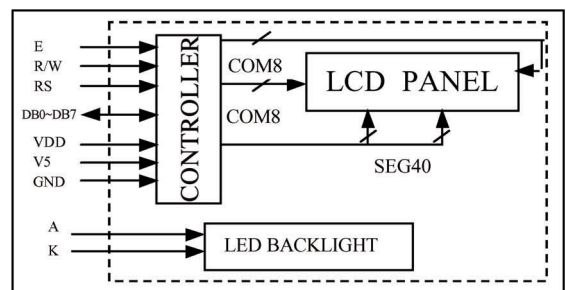
PIN	SYMBOL	SIGNAL DESCRIPTION
1	GND	GND
2	Vdd	Power Supply
3	V5	Adj. Contrast
4	RS	Register Select (H=Data, L=Instruction)
5	R/W	Read/Write L=MPU to LCM, H=LCM to MPU

PIN	SYMBOL	SIGNAL DESCRIPTION
6	E	Enable
7 to 14	DB0 to DB7	Data Bus for 4bit or 8bit Mode
15	A	Anode of LED Unit
16	K	Cathode of LED Unit

### Spezifikationen ( Ta=25°C )

ITEM	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Voltage (logic)	Vdd-GND	-	4.5	5.0	5.5	V
Supply Current (logic)	Idd	Vdd=5.0	-	1.4	3.0	mA
Driving Current (LCD)	Iee		-	0.4	1.0	mA
Driving Voltage (LCD)	Vdd-V5		3.8	4.5	4.9	V
Input Voltage ·· H ··	Vih		2.2	-	Vdd	V
Input Voltage ·· L ··	Vil		...	-	...	V
Output Voltage ·· H ··	...	Ioh=-0.205mA	...	-	-	V
Output Voltage ·· L ··	...	Iol=1.2mA	-	-	...	V
Option LED	I	ext. Resistor	50	200	850	mA
Ambient temp.	t		0	-	55	°C

### Block Diagramm



### Mechanische Abmessungen

