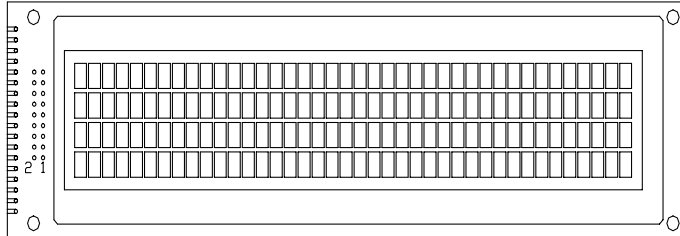


### JM 404 A

### LCD- Standard Charaktermodul



#### Hauptmerkmale

- 40 Charakter / 4 Zeilen
- Ziffernhöhe 5.98 mm
- Single Supply +5Volt
- STN-Technologie
- Einstellbarer Kontrast
- Option LED / EL-Beleuchtung

Kontroller: KS0070B

#### PIN Belegung

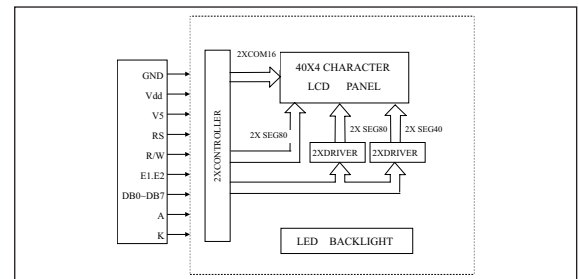
PIN	SYMBOL	SIGNAL DESCRIPTION
1	Vss	Power Supply (GND)
2	Vdd	Power Supply (+5V)
3	V5	Contrast Adjust
4	RS	Register Select (H=Data, L=Instruction)
5	R/W	Read/Write (H: Read mode, L: Write mode)
6	NC	No connection

PIN	SYMBOL	SIGNAL DESCRIPTION
7-14	DB0-DB7	Data Bus Line
15	E1	Enable controller 1
16	E2	Enable controller 2
17	A	Anode of LED unit
18	K	Cathode of LED unit

#### Spezifikationen (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	-	-	6.0	-	mA
Driving Current (LCD)	Iee	-	-	0.9	-	mA
Driving Voltage (LCD)	Vdd-V5	Vdd=5V	3.8	4.5	4.9	V
Input Voltage "H"	V <sub>IH</sub>	-	2.2	-	Vdd	V
Input Voltage "L"	V <sub>IL</sub>	-	-0.3	-	0.6	V
Output Voltage "H"	V <sub>OH</sub>	I <sub>OH</sub> =-0.205mA	2.4	-	-	V
Output Voltage "L"	V <sub>OL</sub>	I <sub>OL</sub> =1.2mA	-	-	0.4	V

#### Block Diagramm



#### Mechanische Abmessung

