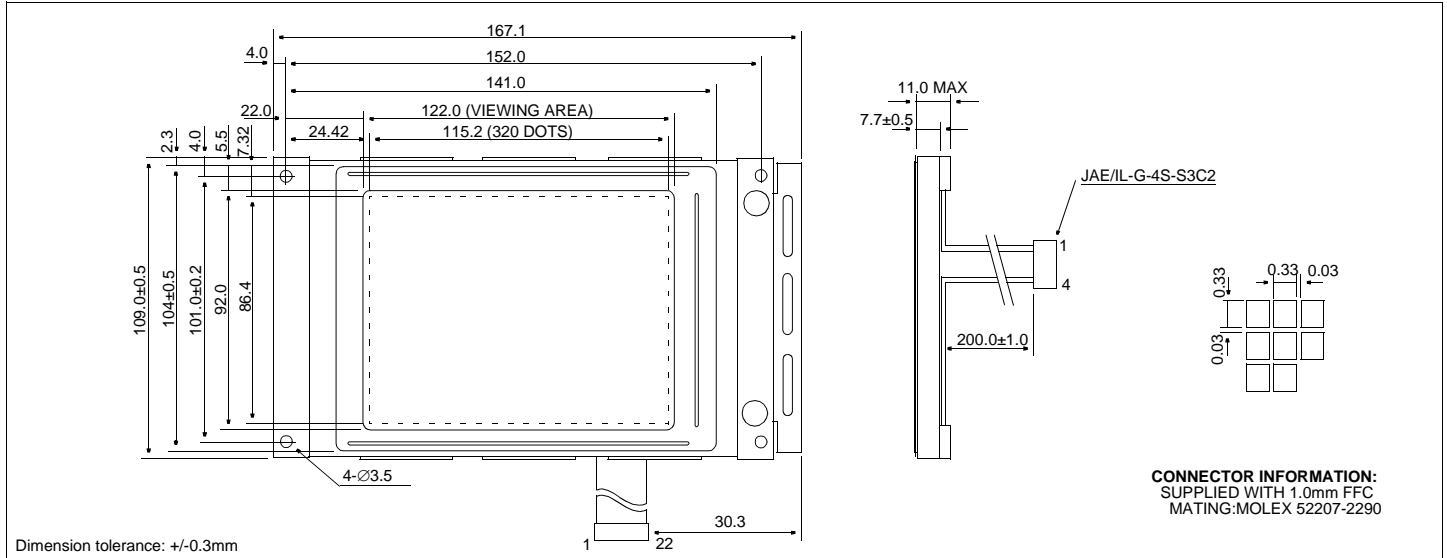


HDM3224N-1

Dimensional Drawing

5.7 " QVGA Graphic CCFL Backlight with Built-in Controller



Features

- Backlight.....CCFL
- Options.....STN/Black and White FSTN
- Normal/Extended Temperature
- Bottom / Top Viewing
- Built-in Controller.....SED1335
- Built-in DC-to-DC inverterIncluded

Physical Data

- Module Size.....167.1W x 109.0H x 11.0T mm
- Viewing Area Size.....122.0W x 92.0H mm
- Dot Pitch.....0.36W x 0.36H mm
- Dot Size.....0.33W x 0.33H mm
- Weight.....199g

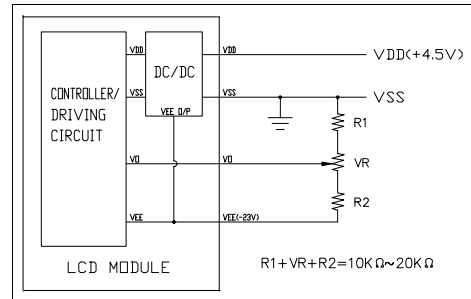
Absolute Maximum Ratings

PARAMETER	SYMBOL	MIN	MAX	UNIT
SUPPLY VOLTAGE	$V_{DD}-V_{SS}$	0	7.0	V
INPUT VOLTAGE	V_{IN}	-	7.0	V
OPERATING TEMPERATURE	T_{OP}	0	50	°C
STORAGE TEMPERATURE	T_{STG}	-20	70	°C

Electrical Characteristics (VDD=4.5±5%, 25°C)

PARAMETER	SYM	CONDITION	MIN	TYP	MAX	UNIT
SUPPLY VOLTAGE	V_{DD}	-	4.23	4.5	4.73	V
	$-V_{EE}$	-	22.8	23.1	23.4	V
SUPPLY CURRENT	I_{DD}	-	-	77	116	mA
CCFL VOLTAGE	V_L	-	-	260	-	V_{rms}
CCFL CURRENT	I_L	-	4	5	6	I_{rms}
CCFL POWER	P_L	-	-	1.3	-	W
CCFL FREQUENCY	F_L	-	-	35	-	KHz
BRIGHTNESS	L	ALL ON	-	28.4	-	cd/m ²
		ALL OFF	-	3.4	-	
DRIVE METHOD	1/240 DUTY					

Power Supply



Pin Connections

PIN NO.	SYMBOL	LEVEL	FUNCTION
DATA CONNECTOR			
1	V_{SS}	0V	Ground
2	V_{DD}	4.5V	Power supply for logic
3	V_L	-	Operating voltage for LC
4	A0	H/L	Data Type Select
5	\overline{WR} (R/w)		Write Signal (8080 family) R/W Signal (6800 family)
6	\overline{RD} (E)		Read Signal (8080 family) Enable Signal (6800 family)
7 - 14	DB0 DB7		3-state I/O Data Bus
15	\overline{CS}		Chip Select
16	\overline{RES}		Reset Controller
17	V_{EE}	#	Power Supply for LCD
18	SEL1	-	0 for 8080 family 1 for 6800 family
19 - 22	NC	-	No Connection
CCFL CONNECTOR			
1	V_{CFL}	-	Power supply for CCFL
2	NC	-	No Connection
3	NC	-	No Connection
4	V_{CFL}	-	CCFL Ground

has built-in inverter output