

UNCONTROLLED DOCUMENT

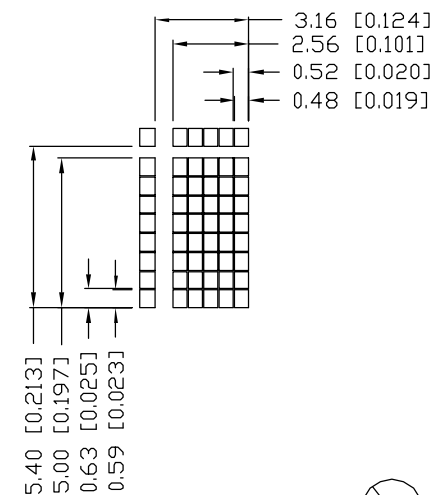
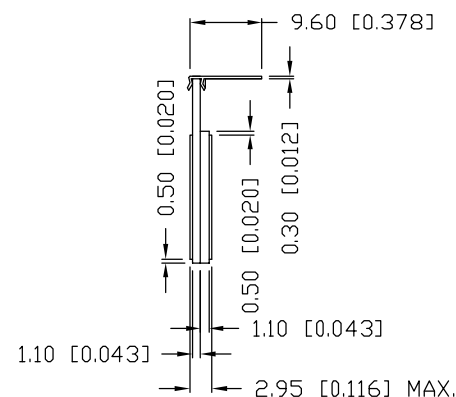
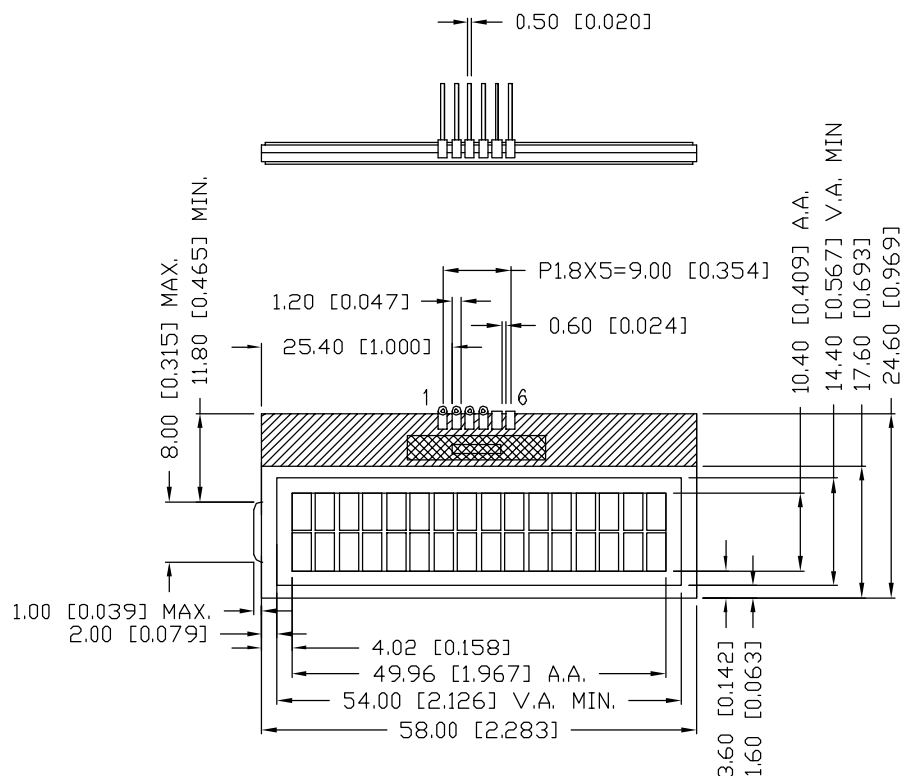
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PART NUMBER

REV.

LCM-E01602CDLF-Y

PRELIMINARY IN P/N DIR



CHARACTERISTICS

FLUID TYPE	STN YELLOW
BACKGROUND COLOR	YELLOW-GREEN
VIEWING DIRECTION	12:00
DISPLAY MODE	TRANSFLECTIVE
OPERATING VOLTAGE	3.0V A.C.
OPERATING TEMP.	0°C TO 50°C
STORAGE TEMP.	-20°C TO 70°C
DRIVING METHOD	1/16 DUTY, 1/5 BIAS.
CONNECTION TYPE	16PINS

*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN.= +DECIMAL PRECISION -0.00 MAX.= +0.00 -DECIMAL PRECISION

REV.

PART NUMBER

LCM-E01602CDLF-Y

16 x 2 CHARACTER LCD MDD, STN YELLOW TRANSFLECTIVE,
I²C INTERFACE, PCF2119, NO BLACKLIGHT.

CONFIDENTIAL INFORMATION

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RELIABILITY NOTE

OUR MANY YEARS OF EXPERIENCE DATA ACCUMULATION INDICATE THAT SOLDER HEAT IS A MAJOR CAUSE OF EARLY AND FUTURE FAILURE. PLEASE PAY ATTENTION TO YOUR SOLDERING PROCESS.



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JN

PAGE: 1 OF 2

SCALE: N/A

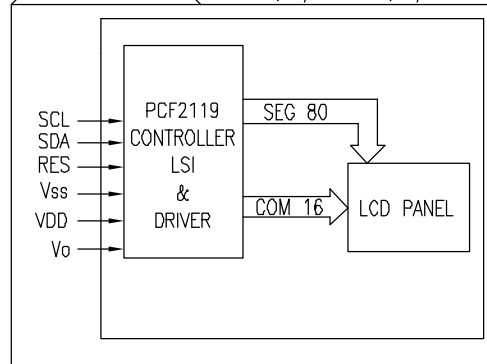
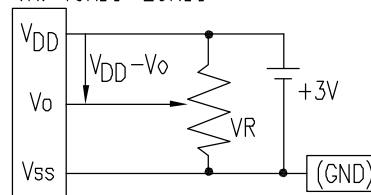
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PRELIMINARY IN P/N DIR

ELECTRICAL CHARACTERISTICS		$V_{DD}=2.2V$ to $3.5V$, $T_A=25^{\circ}C$				
ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT
SUPPLY VOLTAGE FOR LOGIC	$V_{DD}-V_{SS}$	—	2.4	3.0	3.5	V
SUPPLY CURRENT FOR LOGIC	I_{DD}	$V_{DD}=3.0V$	—	0.17	1.0	mA
LCM RECOMMENDED LCD MODULE DRIVING VOLTAGE	$V_{DD}-V_o$	$T_a=0^{\circ}C$	—	—	—	
		$T_a=25^{\circ}C$	$0.8 V_{DD}$	4.4	5.0	V
		$T_a=50^{\circ}C$	V_{SS}	—	—	
INPUT VOLTAGE	HIGH	V_{IH}	—	2.2	V_{DD}	V
	LOW	V_{IL}	—	—	$0.2 V_{DD}$	V

PIN CONFIGURATION			
PIN NO.	PIN OUT	LEVEL	DESCRIPTION
1	SCL	H/L	I ² C BUS SERIAL CLOCK INPUT
2	RES	H	RESET INPUT
3	SDA	H/L	I ² C BUS SERIAL DATA INPUT/OUTPUT
4	VDD	3.0V	POWER SUPPLY VOLTAGE.
5	VSS	0V	POWER SUPPLY GROUND/ CATHODE LED BACKLIGHT.
6	V_o	---	CONTRAST ADJ.

BLOCK DIAGRAM 16 x 2, 1/16 DUTY, 1/5 BIAS

 $V_{DD}-V_o$: LCD DRIVING VOLTAGEVR: 10K Ω -20K Ω 

ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	MIN	MAX	UNIT
POWER SUPPLY VOLTAGE	$V_{DD}-V_{SS}$	-5	6.5	V
POWER SUPPLY FOR LCD	$V_{DD}-V_o$	-5	7.5	V
LED POWER DISSIPATION	PAD	—	0.46	W
LED FORWARD CURRENT	IAF	—	60	mA
LED REVERSE VOLTAGE	VR	—	5	V
OPERATING TEMPERATURE		0	+50	C
STORAGE TEMPERATURE		-20	+70	C

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