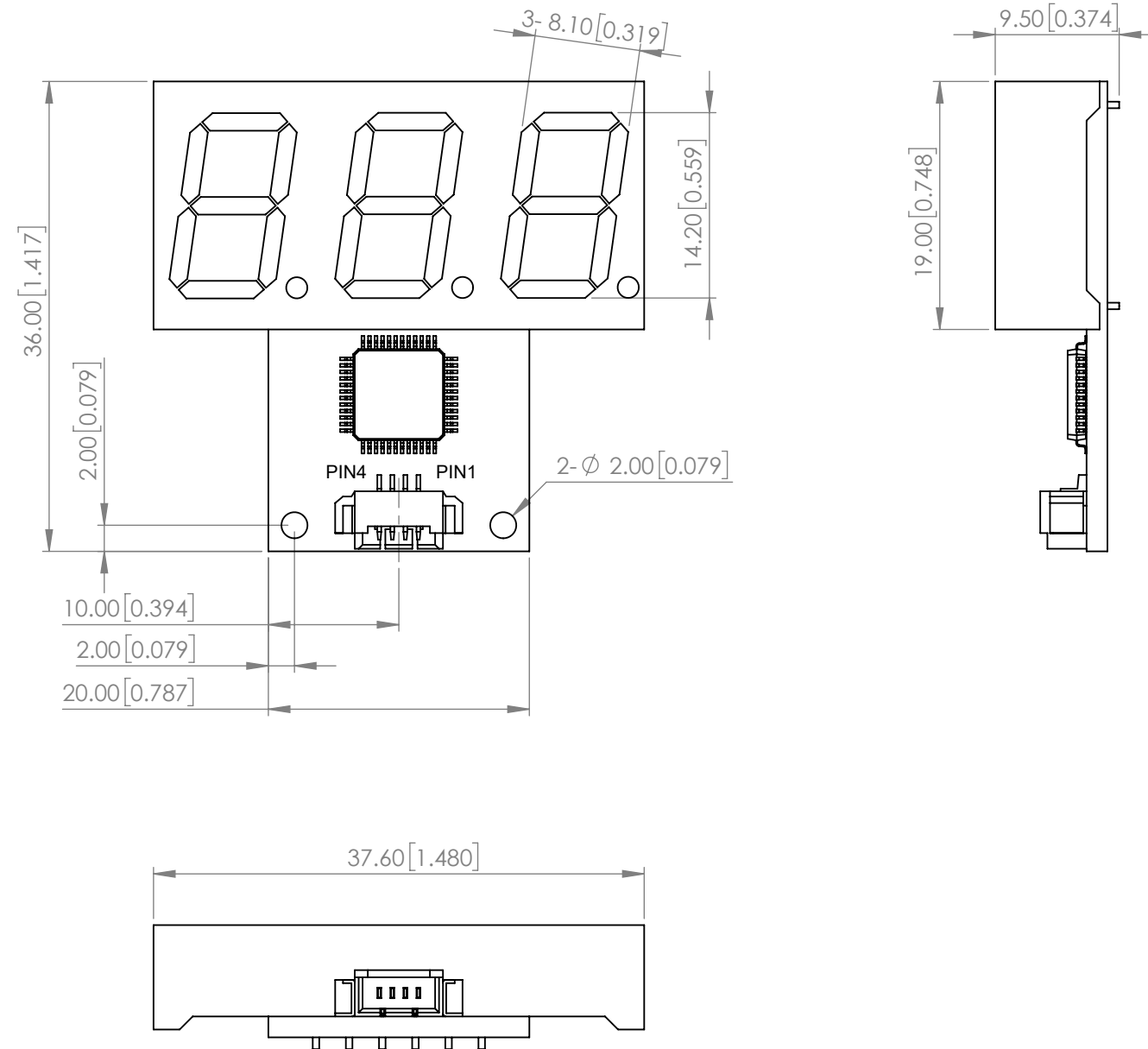


PART NUMBER		LDT-M5606RI-UR	REV	A
REV	E.C.N. NUMBER AND REVISION COMMENTS			DATE
A	ECN-Lumex202100025			06.01.21



ELECTRO-OPTICAL CHARACTERISTIC TA=25°C PER SEGMENT

PARAMETER	MIN	TYP	MAX	UNITS	TEST COND
PEAK WAVELENGTH	-	660	-	nm	If=10mA
FORWARD VOLTAGE	-	1.8	2.0	Vf	If=10mA
REVERSE CURRENT	-	-	100	uA	VR=5V
LUMINOUS INTENSITY	-	-	12650	ucd	If=10mA
EMITTED COLOR	RED				
FACE COLOR	BLACK				
SEGMENT COLOR	MILKY WHITE DIFFUSED				

ABSOLUTE MAXIMUM RATINGS TA=25°C PER SEGMENT

PARAMETER	MAX	UNITS
PEAK FORWARD CURRENT*	100	mA
FORWARD CURRENT	25	mA
POWER DISIPATION	50	mW
REVERSE VOLTAGE	5	V
STORAGE TEMPERATURE	-35 TO +85	°C
OPERATING TEMPERATURE	-35 TO +85	°C

* 1/10 Duty, 10KHz

PIN ASSIGNMENT

PIN NO.	DESCRIPTION
1	TX1
2	RX1
3	3.3V
4	GND

*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}

UART CONFIGURATION

ITEM	DESCRIPTION
BAUD RATE	115200
DATA BIT	8
STOP BIT	1
PARITY BIT	NONE
FLOW CONTROL	NONE

UART (TTL SERIAL INTERFACE) 7 SEGMENT LED DISPLAY USER GUIDE**1. USING UART INTERFACE (TX, RX, +3.3V, GND).****2. TWO OPERATION COMMANDS(ASCII String and AT Command), USING C LANGUAGE AS EXAMPLE:**

-> **Input ASCII string directly.** Ex., input "12345" the display will show 12345 instantly. However, it physically has only four digits, only 1234 been shown since the display is aligned to the **left**. String input Illustration as below :

```
-> printf("5697");
-> printf("%2doC",temperature); "Display two digits Celsius number"
-> printf("%d",number);
-> printf("%4f",point);
-> printf("%d.%d",hour,minute)
-> if there is only two digits and you like to align them to the right,
you can put two space ' ' to achieve that ,such as printf(" 38").
```

-> **After each string or command sent, a 5ms delay or wait for display to return an 'E' is needed.**

```
-> Ex. while (USART_ReceiveData(UART1) != 'E') {}
```

-> **Display one digit AT Command:**

-> **at80=(0, digit position, ASCII pattern)**

-> Ex. printf("at80=(0,3,7)") means display a '7' on digit 3 (digit number starts at 0)

-> **Clear display : atd0=()**

```
-> printf("atd0=()");
```

-> **Blink control : ate0=(0 or 1), default as 0.**

```
-> printf("ate0=(1)"); start blinking
```

```
-> printf("ate0=(0)"); stop blinking
```

-> **Frequency of blinking : ate1=(0~10), default as 5.**

```
-> printf("ate1=(3)");
```

-> **Diming control : atf2=(0~4).**

0 stands for display off, 1 stands for dimmest, 4 stands for not dim.default as 4.

```
-> printf("atf2=(4)");
```

*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}



425 N. GARY AVE.
CAROL STREAM, IL 60188
PHONE : 800-278-5666
FAX : 630-315-2150
WEB : WWW.LUMEX.COM

0.56", 3 DIGIT, SEVEN SEGMENT LED DISPLAY, RED LEDs, BLACK FACE, MILKY WHITE DIFFUSED, UART INTERFACE

THE SPECIFICATIONS MAY CHANGE AT ANY TIME WITHOUT NOTICE.

CONFIDENTIAL INFORMATION
THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPERTY OF LUMEX INC. EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY LUMEX INC., THE HOLDER OF THIS DOCUMENT SHALL KEEP ALL INFORMATION CONTAINED HEREIN CONFIDENTIAL AND SHALL PROTECT SAME IN WHOLE OR IN PART FROM DISCLOSURE AND DISSEMINATION TO ALL THIRD PARTIES.

DATE : 2021.01.19

DRAWN BY : E.C.

PAGE : 2 OF 3

CHKD BY : E.C.

SCALE : NTF

APRVD BY : G.Y.

UNIT : mm [INCH]

Ⓢ


UART (TTL SERIAL INTERFACE) 7 SEGMENT LED DISPLAY USER GUIDE

3. AT CCOMMAND AT80=(0, DIGIT POSITION, ASCII PATTERN) ASCII PATTERN TABLE

ASCII	DISPLAY PATTERN	ASCII	DISPLAY PATTERN
(' ')	(All segments off)	('A')	
('0')		('B')	
('1')		('C')	
('2')		('D')	
('3')		('E')	
('4')		('F')	
('5')		('G')	
('6')		('H')	
('7')		('I')	
('8')		('J')	
('9')		('L')	

ASCII	DISPLAY PATTERN	ASCII	DISPLAY PATTERN
('O')		('b')	
('P')		('c')	
('U')		('d')	
('W')		('e')	
('X')		('f')	
('Y')		('g')	
('a')		('.')	

*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

 <p>425 N. GARY AVE. CAROL STREAM, IL 60188 PHONE : 800-278-5666 FAX : 630-315-2150 WEB : WWW.LUMEX.COM</p>	0.56", 3 DIGIT, SEVEN SEGMENT LED DISPLAY, RED LEDs, BLACK FACE, MILKY WHITE DIFFUSED, UART INTERFACE	DATE : 2021.01.19	DRAWN BY : E.C.	
	THE SPECIFICATIONS MAY CHANGE AT ANY TIME WITHOUT NOTICE.	PAGE : 3 OF 3	CHKD BY : E.C.	
	CONFIDENTIAL INFORMATION THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPERTY OF LUMEX INC. EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY LUMEX INC., THE HOLDER OF THIS DOCUMENT SHALL KEEP ALL INFORMATION CONTAINED HEREIN CONFIDENTIAL AND SHALL PROTECT SAME IN WHOLE OR IN PART FROM DISCLOSURE AND DISSEMINATION TO ALL THIRD PARTIES.	SCALE : NTF	APRVD BY : G.Y.	
		UNIT : mm [INCH]		