

### 0.56 Inch Single Digit 7 Segment LED Display With 74HC595 Shift Register

### OSL10564-74HC595-X

#### **■** Features

- 0.56 inch Single digit 7-segment LED board with shift register 74HC595 module for serial signal connection..
- It can display with 3 signals of SDI, SCK, LATCH (SPI signal such as Arduino). If it need more digits, it can be controlled 3 by connecting SDO to the adjacent SDI. Since the display is latched (memorized) by the 74HC595, the microcomputer can concentrate on other tasks until changing the display next time.
- •The 74HC595 device contains an 8-bit serial-in, parallel-out shift register that feeds an 8-bit D-type storage register. The storage register has parallel 3-state outputs.

Separate clocks are provided for both the shift and storage registers. The shift register has a direct overriding clear (SRCLR) input, serial (SER) input, and serial output for cascading. When the output-enable (OE) input is high, the outputs are in the high-impedance state.

Both the shift register clock (SRCLK) and storage register clock (RCLK) are positive-edge triggered. If both clocks are connected together, the shift register always is one clock pulse ahead of the storage register.

### Applications

• Arduino kit

■ Absolute Maximum Rating (Ta=25°C)

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Item	Symbol	Value	Unit
Operating Supply Range(DC)	Vi	6	V
Input Current(DC)	Ii	45	mA
Power Dissipation	Pt	270	mW
Operating Temperature	Topr	-30 ~ +70	$^{\circ}$ C
Storage Temperature	Tstg	-40~ +85	°C
Lead Soldering Temperature(1.6mm from seating plane)	Tsol	<b>260</b> °C/5sec	°C

# ■ Electrical -Optical Characteristics (Ta=25°C)

			Input Voltage(DC)		Input	Iv(mcd)		λD(nm)					
Part Number Color						Current							
		$V_{i(V)}$		$I_{f\left(MA\right)}$									
				Min.	Тур.	Max.	Max.	Min.	Тур.	Max.	Min.	Тур.	Max.
OSL10564-74HC595-W	White	W		3	-	6	45	-	65	-	X=0.27 Y=0.28		
OSL10564-74HC595-B	Blue	В		3	-	6	45	-	50	-	460	470	475
OSL10564-74HC595-G	Pure Green	G		3	-	6	45	-	200	-	515	520	530
OSL10564-74HC595-YG	Yellow Green	YG		3	-	6	45	-	20	-	565	571	575
OSL10564-74HC595-Y	Yellow	Y		3	-	6	45	-	60	-	585	590	595
OSL10564-74HC595-R	Red	R		3	-	6	45	-	26	-	625	630	650
OSL10564-74HC595-RA	High Luminance Red	RA		3	-	6	45	-	100	-	620	625	630

<sup>\*1</sup> Tolerance of measurements of chromaticity coordinates is ±10%

<sup>\*4</sup> Tolerance of measurements of forward voltage is ±0.1V









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<sup>\*2</sup> Tolerance of measurements of dominant wavelength is ±1nm

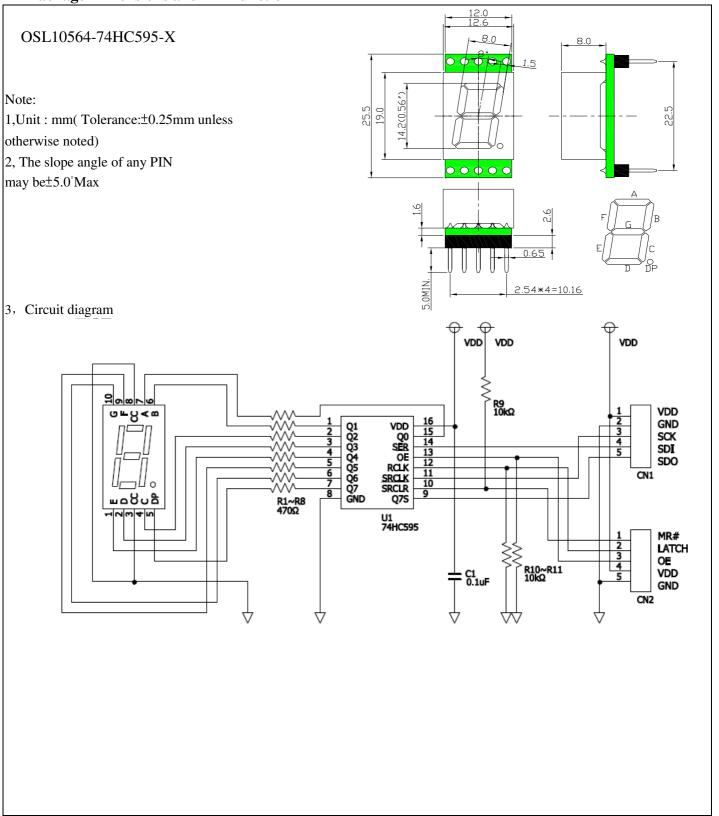
<sup>\*3</sup> Tolerance of measurements of luminous intensity is  $\pm 15\%$ 



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**■ Package Dimensions and Pin Function** 



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