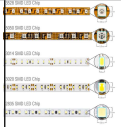






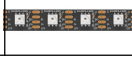



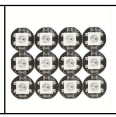
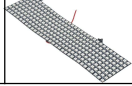

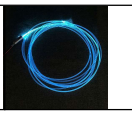



TYPE:	PHOTO:	LOOK:	CHARSCTERISTICS:	VOLTAGE:	PRO:	CON:	COST:	SIZE:
			LEDs are manufactured by different companies with different chips and products. Color temperatures may be inconsistent in different batches by same manufacturer. Several companies have strenuous color temperature control across batches, but usually require expensive strip.	LED Strip comes in voltages from 5 volts to 120 volts. LEDs can run slightly over and under rated voltages, but is very hard on the LED and chip. For example you'll see 12 volt strip at around 8 volts very dim, and can run to just over 13 volts, but will burn up after that. The correct control for strips is PWM, explained in controllers section.		LED Strip can be cut down to size for your project, however care must be taken in doing so. 5 volt strip can be cut every pixel, 12 volt every 3 pixels and 24 volt every 6 pixels. There are marked cut lines usually at the solder pads where you can cut. Power can be run from either direction, but smart pixels data can only come in "DI" and exit "DO."		
CHIP TYPES		Small to medium: 3528, 5050, 3014, 3020, 2835	Numbers represent size of LED. 5050 is 5mm x 5mm. 2835 is 2.8mm x 3.5mm.	5, 12, 24 volt			\$15&up	5 Meter/16 feet
"DUMB" RGB STRIP - 5050, 2832,		Pixelated Straight Line, can only do same color	Analog: Bright, RGBAW options, Easier to solder, different weatherproof options	5 volt, 12 volt	Easy to use, color mixing,	Breaks if bent sideways	15.00	5 Meter/16 feet
"SMART" RGB STRIP - 2812b, 2811		Pixelated Straight Line each pixel independent	Digital: Bright, RGBW option, Easier to solder, diffent weatherproof options,	5 volt, 12 volt	Little more difficult to program,	Breaks if bent sideways, one breaks line stops	20.00	5 Meter/16 feet
LED NEON		Neon Tube-ish with flat back.	Possible RGB options. No hot spots due to LED strip inside silicone cover. Weatherproof.	12 volt	Weatherproof	Slightly difficult to splice/re	20.00	5 Meter/16 feet
Side Emitting		RGB Strip flatness, but light out one side.	Good for arches, solid color only.	12 volt	Good for curves, very low profile	No RGB	20.00	5 Meter/16 feet
COB Strip		Continuous color on flexible PCB (same as strip).	No hot spots same as RGB Strip. Takes a bit more power as more LEDs per area.	12 volt	No hot spots	Power consumption	25.00	5 Meter/16 feet
WHITE PCB		White PCB						
BLACK PCB		BLACK PCB						
					IP RATINGS	IP20: No weatherproofing; IP67: Silicone cover; IP68: Encased in silicone tube.		
					COLOR TEMP	3000k: Warm White; 4000k: Neutral; 5000-6000k: Cool White		
Through Hole LED		Standard Through Hole LED. Single tiny lightbulb	Time consuming to solder in bulk and with resistor can be used with any voltage.	Various	Can create many different looks	No real control other than on or off.	10.00/100	1,3,5 watts
LED SEQUIN		Small color LED	Very small single color LED	5	Tiny and bright	Not many color options	2.00	1/8x1/4 inch
LED Module		3 bright LEDs per Module	Common for sign back lighting. Various white color temperature options, and RGB options.	12	Easy to wire and bright	Only available in 3 pixel modules (that I know of)	Various in bulk	3/4x2 inch
2812 Pixel PCB		Single LED in RGB	Small 5050 pixel.	5 volt	Easy to solder and place where you want them.	Labor intensive as 6 solder pads per pixel (power, data, negative)	.10 per	1/2x1/2 inch
MATRIX		LED Screen, various sizes	Many RGB LEDs in a size. Can scroll messages and images. Same concept as LED walls. Pitch (size) determines clarity.	5-12volt	Can scroll colors/images	Difficult to program and can get expensive.	Varies with control	Various
EL Wire: Electroluminescent wire		Single solid color	Good color across whole wire. Various sizes.	High	Good color temperature	Hard to splice, electronic whine.	\$15	Various

Fiber Optic		Single Solid color	Easier to use than EL. Can see imperfections in fiber.	5, 12 volt	Easy to use. Can inject LED from both ends.	Not as bright as EL. Can't splice, need to replace fiber if broken.	\$10 for small spool	1mm-6mm width
LED Flood		LED Low profile flood	Stand alone color changing flood. Available in multiple sizes and wattage. Available in different IP ratings as well.	12, 120 volt	Affordable. Decent color.	Not useful for theatrical purposes. Lack of control.	\$55 (4)	10"x3"x8"