

### LED Flex Ribbons

Part # ZFS-8500-CW

ZFS-8500-WW

Pb Free



### *Applications*

LED flex ribbons are most commonly used for backlighting signs, architectural accent lighting, display case illumination and decorative lighting.

### *Power Input*

The ZFS ribbons require 12 VDC, each 500 mm strip requires 200mA. ZFS-12504 requires 300mA.

### *Ribbon Length*

The flex ribbons are available in 5 meter reels or can be supplied in 500mm sections (30 LEDs per 500mm section). The ribbons can be cut into smaller sections of 100mm, each 100mm section of 3-LEDs includes marked lines for cutting. The 100mm sections contain holes on each side in which a connector can be placed or a wire soldered into place.

Individual sections are not supplied with an insulated wire on one end. However, 5 meter reels do contain a 4" insulated wire on one end.

### *Output Dimming*

Optimum dimming is accomplished with a PWM dimmer, which will maintain operating voltage to the flex ribbon. Varying the duty-cycle to the LED will permit easy changes to the light output. Less sophisticated application designs (accent lighting, case lighting) can apply a lower voltage (from 12 to 8 VDC ) to the ribbon to obtain desired brightness levels.

### *Cautions*

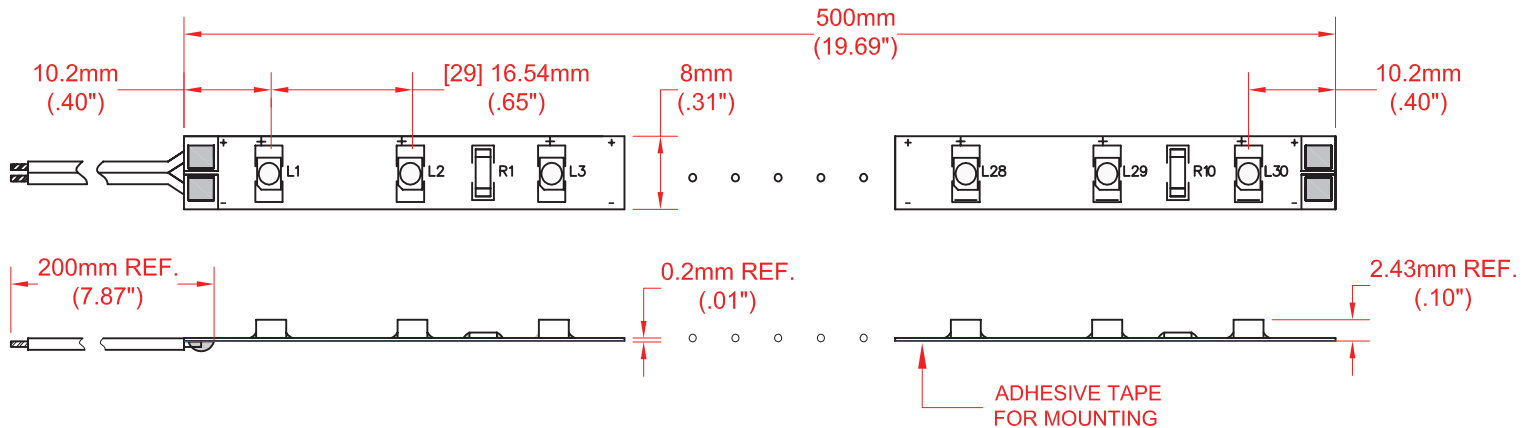
LEDs are electrostatic sensitive devices (ESD). Take appropriate precautions during handling and installation of the strips.



## Series Applications

If one LED is damaged, the other LEDs will remain lit unless the trace is damaged.

One reel of 5 meters can be operated with 12 VDC at 2.0 amps or larger. No more than 10 meters of flex ribbon should be connected in series and operated from one power source.



## Mounting

The flex ribbons come with adhesive backing and a paper cover strip that can be easily peeled away for mounting to most surfaces.

## Soldering

The soldering tip should be sized to match the solder pads. The tip temperature should be maintained at a temperature just above what is required to melt the solder being used (220 C for 63/37 solder and 260 C for SAC lead free solder). A small amount of solder flux can be added to the area to be soldered to aid in solder flow and cleaning of oxides.

If soldering to the backside of the flex strip, care should be taken to remove the adhesive backing from the solder pads prior to soldering.