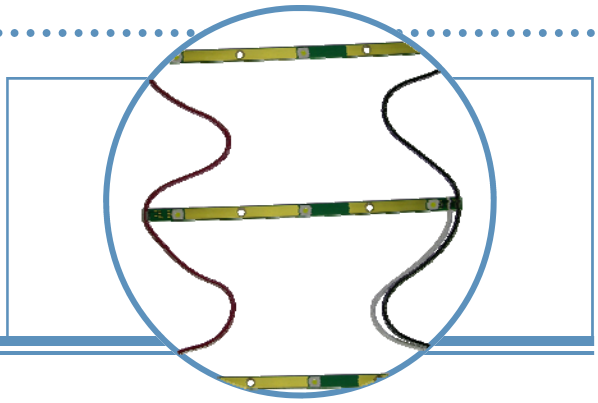
OPA775, OPA776
VLED Back Lighting Ladder
(Jacob's Ladder)

TT electronics
OPTEK Technology

Back Lighting Strip Series

- 3, 0.5 watt LEDs per strip
- Mono-color per strip (Daylight White)
- Component beam angle 120°
- RoHS Compliant



The **OPA775 and OPA776** are designed for areas where lighting intensity and reliability are essential. The light beam angle of 120° is ideal for illuminating small and medium size areas while requiring minimal space. The devices are mounted on an FR-4 PC Board for ease of use with an easy to use IDC connector interface.

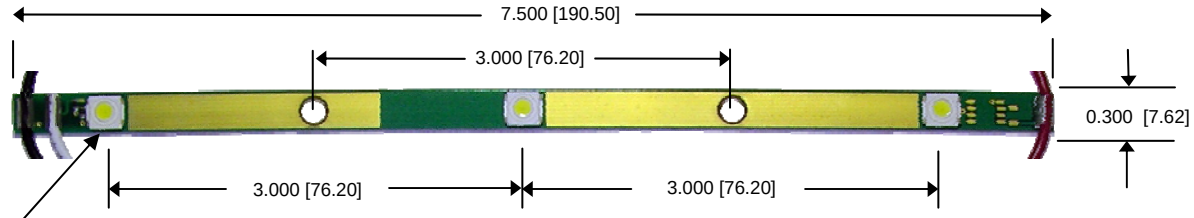
For custom colors and design contact your OPTEK representative.

Applications

- Architectural accent lighting
- Under-counter lighting
- Media illumination
- Lighting for large channel letters
- Backlighting for light boxes
- Point-of-sale displays

Electrical / Optical Characteristics: T_A=25°C, I_F=1.4A

Part Number	Typical Forward Voltage (V)	Luminous Flux (lm)	Beam Angle	Color	Dominant Wavelength
OPA775(Note: 3)	12	50	120°	Daylight White	5,750 °K
OPA776(Note: 4)	24	100			



Part Number	Connector	Insertion Tool	Wire Size Min/Max
OPA775	Zierick 1286T	Zierick 1286 Series	18 AWG or 20 AWG
OPA776			

DO NOT LOOK DIRECTLY AT LED WITH UNSHIELDED EYES OR DAMAGE TO RETINA MAY OCCUR.

Notes:

1. Maximum storage and operating temperature –40° ~ +100°C ESD threshold (HBM) 2000V
2. 12VDC power supply not included. 0.2A minimum rating required, for each OPA775.
3. 24VDC power supply not included. 0.2A minimum rating required for each OPA776.

ATTENTION
OBSERVE PRECAUTIONS
ELECTROSTATIC
SENSITIVE DEVICES

Pb
RoHS

OPTEK reserves the right to make changes at any time in order to improve design and to supply the best product possible.

OPTEK Technology Inc. — 1645 Wallace Drive, Carrollton, Texas 75006
Phone: (972) 323-2200 or (800) 341-4747 FAX: (972) 323-2396 visibleLED@optekinc.com www.optekinc.com

Suggested Design Options

Optek Part Number	Number of LEDs per Strip	Number of Strips per Buss	LED Drive Current per Strip	AWG	Supply Voltage
OPA775	3	1 to 30	125mA	18	12V
OPA776	6	2 to 60*	125mA	18	24V
Optek Custom Assembly**	Other	Other	Other	Other	Other

Notes:
* Multiples of 2 only
** Contact Optek or an authorized distributor to discuss your application.

1. Install backplane (not included) behind panel to be illuminated.
2. Use masking tape (not included) to temporarily position the boards on backplane.
3. Reposition all boards until optimal illumination is achieved.
4. Attach PCBs to backplane with #6 screw and nut, nylon press fastener, or adhesive tape on back of boards.

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