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# ACR-1042-1927

## PRODUCT DATA SHEET

09/29/10

### 7.45" DUAL LED RAIL SET

(Single Bank per Rail, 104V at 62.5mA per Bank)

#### GENERAL DESCRIPTION

The ACR-1042-1927 is designed as a replacement for two field-replaceable single tubes used in a dual edge lit 8.4" CCFL display.

One dual rail set required per display.

The dual rail set requires the use of a constant current source to properly drive the LEDs.

#### MECHANICAL / ENVIRONMENTAL

Weight = 5.0 grams

Altitude = 35,000 ft max.

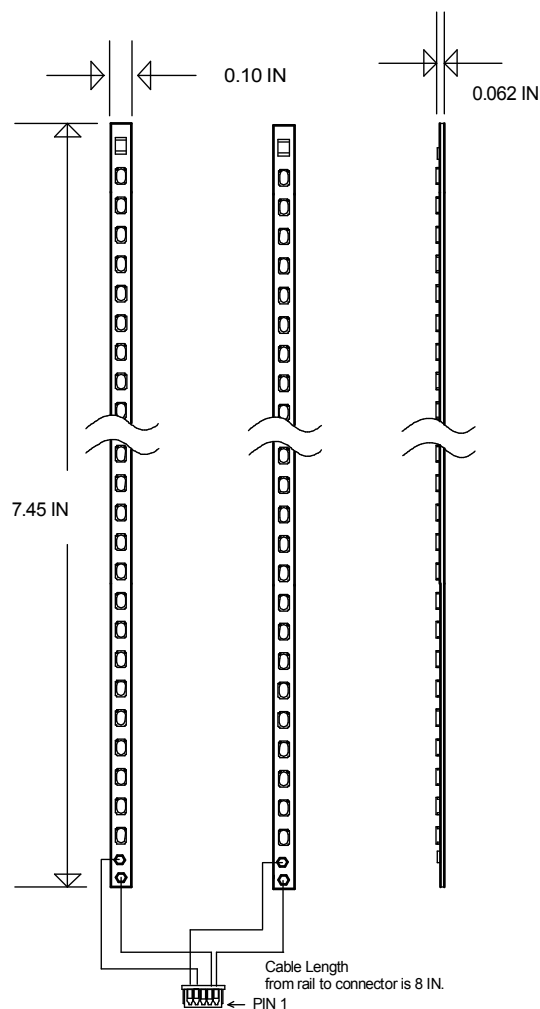
Humidity < 95% non-condensing

Size (L x W x H) = 7.45 IN x 0.10 IN x 0.062 IN (per rail)

PCB thickness = 0.032 IN

Input Connector = CON1

RoHS Compliant



INPUT CONNECTOR  
CON1  
MOLEX 51021-0500

PIN# FUNCTION

- |   |                  |
|---|------------------|
| 1 | +LED (ANODE 1)   |
| 2 | +LED (ANODE 2)   |
| 3 | NC               |
| 4 | -LED (CATHODE 2) |
| 5 | -LED (CATHODE 1) |

#### MAXIMUM RATINGS\*

| Symbol | Parameter                                                    | Value       | Unit |
|--------|--------------------------------------------------------------|-------------|------|
| Tled   | Operating Temperature of LED Edge Light (Light Rail Contact) | -40 to +100 | °C   |
| Tstg   | LED Rail Storage Temperature                                 | -40 to +100 | °C   |
| Ifwd   | LED Forward Current per Bank                                 | 100         | mADC |

\*Maximum Ratings are those values beyond which damage may occur.

#### LED OPTICAL CHARACTERISTICS

LED Manufacturer Specifications for reference purpose only

| Symbol | Parameter          | Test Condition | Min | Typ   | Max  | Unit |
|--------|--------------------|----------------|-----|-------|------|------|
| BL     | LED Brightness     | Ifwd = 150mA   | 36  | 39.4  | 42.8 | Lm   |
| X      | White X Coordinate |                |     | 0.320 |      | -    |
| Y      | White Y Coordinate |                |     | 0.317 |      | -    |

#### LED RAIL ELECTRICAL CHARACTERISTICS

Ifwd = 62.5mA (1 Bank/Rail, 2 Rails/Dual Rail Set), Tled = +75°C (LEDs without heat sinking to the display)

| Symbol | Parameter                     | Test Conditions | Min | Nom | Max | Unit |
|--------|-------------------------------|-----------------|-----|-----|-----|------|
| Vfwd   | LED Rail Forward Voltage Drop |                 | 94  | 104 | 114 | VDC  |

#### TYPICAL LED RAIL PERFORMANCE GRAPH

