

## LED Brake Light

Model: 961, P/N: A21927



### Product Description

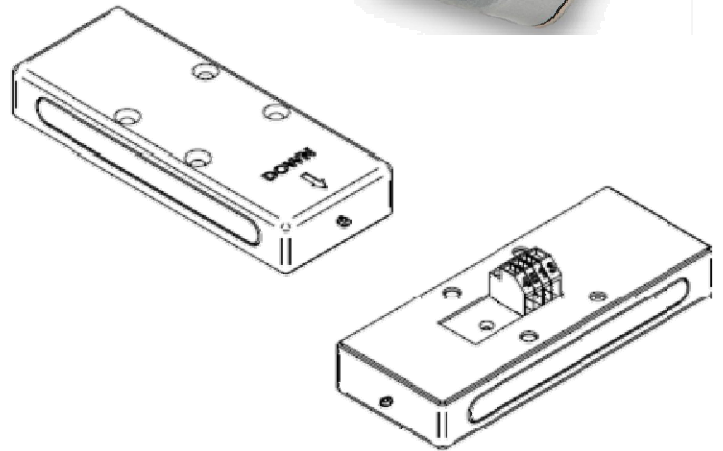
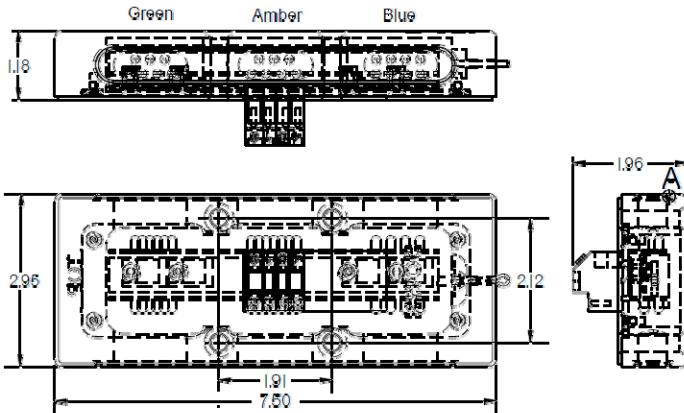
Matrix Railway next generation of PAR46 Solid-State LED Headlights are built to meet the stringent rail specifications and rugged environment.

The solid-state circuitry provides two redundant circuits, with dual drivers and dual Independent LED-Board Clusters. If one channel fails, the second remains "ON" until the headlight is replaced.

The advanced electronics limits electro-magnetic emissions, and protects against Over/Under voltage, Over/Under current, reversed voltage, fast transient, and power port surges.

### Technical Description:

Forward-Cooling PAR46 Subway Car LED Headlight, 14 watts, 37.5 VDC, polycarbonate lens with an anti-abrasive hard coating, Mogul End, Brass-Nickel Plated Prongs inside an Epoxy-Potted Aluminum Housing, Max O/A Length 4-3/8", 5 Year Warranty.



### Electrical Specifications

Nominal Input Voltage	• 74 VDC
Nom. Input Voltage Ranges	• 60 – 90 VDC
Power	• 14 Watts
Input Protection	• Reverse Voltage Protection • High/Low Voltage Protection • Spike and Transient Protection
Rear Connection Options	• Wago Connector/Terminal Block
Warranty	• 50,000 Hrs

### EMI/EMI Tests

Electrostatic Discharge	IEC 61000-4-2
Radio Frequencies-Enclosure	IEC 61000-4-3
Fast Transients Burst-Power Ports	IEC 61000-4-4
Fast Transient Burst – Signal Ports	IEC 61000-4-4 2kV
Surges – Power Ports	IEC 61000-4-5
Power Port and Enclosure-Emissions Tests	CISPR1 Group 1 Class A

### Photometric

Color Temperature, CCT	• 3000 Deg K
Raw Lumens	• 3150 lm
Effective Lumens	• 900 lm
Luminous Efficacy	• 150 lm/W
CRI	• > 70
Lumen Maintenance	• IES LM-80-20
Optical & Elec'l Mmnts Of SSL Prods	• IES LM-79-19

### Environmental Compliance Tests

Shock & Vibration, and Bump Test	IEC 61373
Operating Temperature	IEC 60068-2-14
Cooling Test, -40 °C (96Hrs)	IEC 60068-2-1
Dry Heat Test, 85 °C (96 Hrs)	IEC 60068-2-2
Damp Heat Test, 25 °C to 57 °C (37Hrs)	NYCTA Requirement
IP Rating	IP65