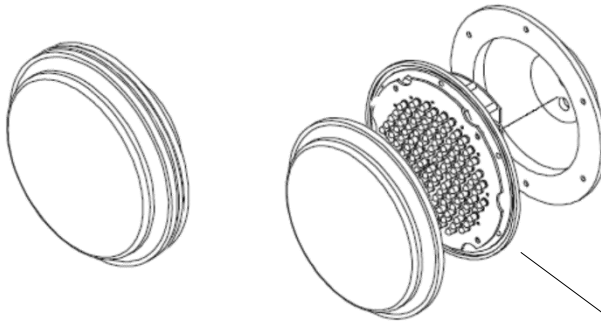


**Product Description**

Matrix Railway LED Taillights and Marker Lights feature a sleek, low-profile design and an advanced wide-range power supply. With an operating input voltage range of 22Vdc to 95Vdc, they accommodate most industry voltage standards, including 24 Vdc, 37.5 Vdc, and 74 Vdc with a tolerance of  $\pm 20\%$ .

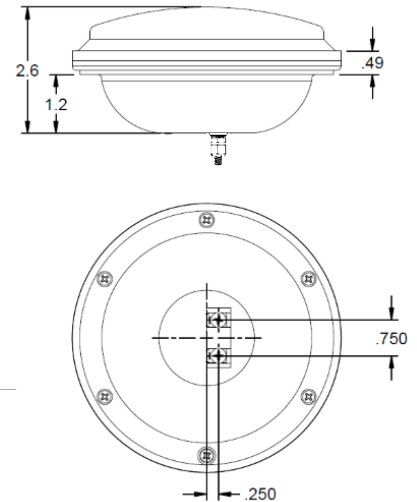
**Key Features:**

- **Industry Compliance:** Matrix Railway PAR46 LED Marker Lights meet stringent rail specifications and are built for rugged environments. They are listed in the FRA Approved List.
- **Reliability:** Designed with redundant LED circuits that ensure continuous operation and maximum safety even after an LED failure event.
- **Advanced Protection:** The lights feature linear regulators that eliminate EMI/EMC emissions and input protection circuitry to guard against over/under voltage, over/under current, reversed voltage, and fast transients.
- **Durability:** Matrix Railway Marker Lights come with a 5-year warranty, ensuring long-lasting performance.



**LED Pattern Configured for Maximum Light Distribution**

LED Driver Module



Electrical Specifications	
Nominal Input Voltage	• 37.5 VDC
Nom. Input Voltage Ranges	• 22 – 95 VDC
Power	• 14 Watts
Input Protection	• Reverse Voltage Protection
Input Protection Rear Connections	• Over/Under Voltage Protection
	• Spike and Transient Protection
	• Two (2) #8 Rear Studs
	• Custom rear connections can be implemented
Warranty	• 5 Years

Compliant Standards	
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
Conducted Immunity, Power Ports	• IEC 61000-4-6

Photometric	
Wavelength-Dominant	• 624 nm
Luminous Intensity	• 200 Cd
Number of LED	• 98 LEDs
FRA Approved	• 49 CFR 221.14 Standard

Environmental Compliance Tests	
Shock & Vibration, and Bump Test	• IEC 61373
Operating Temperature	• IEC 60068-2-14
Cooling Test, -40 Deg C (96Hrs)	• IEC 60068-2-1
Dry Heat Test, 85 Deg C (96 Hrs)	• IEC 60068-2-2
Damp Heat Test, 25 Deg C to 57 Deg C (37Hrs)	• IEC 60068-2-30