**PULSECOM**

# OC3 TO DS3 MINIATURE SONET MULTIPLEXER
# 3O3D3-23L2A MOUNTING

**CLEI™ Code  SOM1X00G,  CPR 202615**

## 1.  INTRODUCTION

This practice describes the Pulsecom® 3O3D3-23L2A Mounting, shown in Figure 1, for the  OC3 to DS3 Miniature SONET Multiplexer O3D3 Family. Installation instructions and engineering references are included.
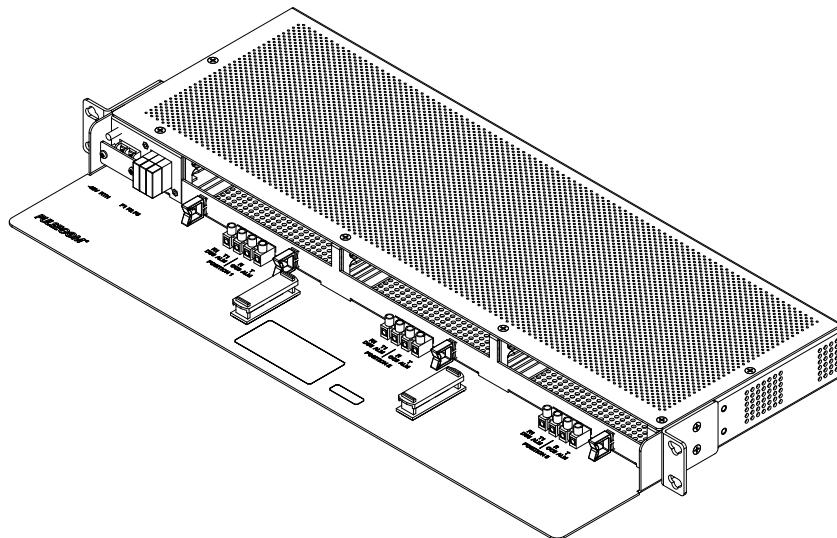


**Figure 1.  3O3D3-23L2A Mounting**

### A. Reason for Reissue

#### *Equipment*

The 3O3D3-23L2A is identical to the 3O3D3-23L2 except that front-panel fuses have been moved to the left side of the assembly to improve manufacturability. The 3O3D3-23L2A is released to full production.

#### *Manual*

This practice has been reissued to update Figure 3.

### B. Description

The 3O3D3-23L2A mounts in a 23" rack and houses up to three 200 Mechanics® modules, such as the Pulsecom O3D3.

### C. Features

The mounting provides the following features:

- Accepts up to three 200 Mechanics plug-in modules to provide inexpensive installation in central office (CO), digital loop carrier (DLC) remote terminal (RT), or customer-premises equipment (CPE) applications
- Simple installation and use
- Per-channel fusing
- Front access to all connections
- Integral fiber management via four fiber routing clips and rugged mechanical guard
- Integral coaxial cable management via two cable clips

## 2. INSTALLATION

Table 1 describes the connectors and fuses shown in Figure 2.

Follow Procedure 1 to install the mounting in a 23" rack. Then follow Procedure 2 to connect power, ground, and alarms.
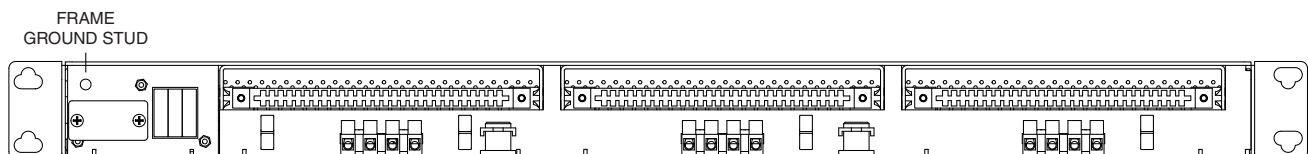
**WARNING**

*When connecting fibers to the 3O3D3-23L2A mounting, use care to avoid breaking the fiber. Always follow fiber bend radius guidelines and take advantage of the mechanical fiber guard provided by the 3O3D3-23L2A.*

**Table 1.  3O3D3-23L2A Connectors and Fuses**

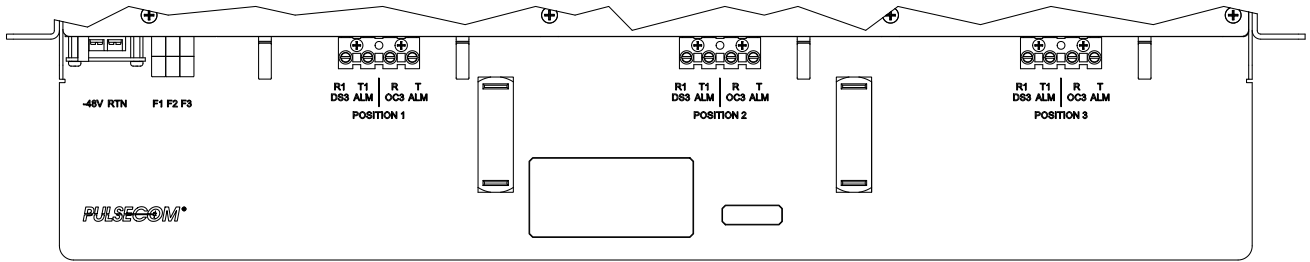| Connector | Function |
|---|---|
| Frame Ground | Stud for frame ground connection |
| −48V | Screw terminal for −48V power connection |
| RTN | Screw terminal for power return connection |
| DS3 ALM | DS3 alarm T1 and R1 terminals for POSITION 1, POSITION 2, and POSITION 3 |
| OC3 ALM | OC3 alarm T and R terminals for POSITION 1, POSITION 2, and POSITION 3 |
| **Fuse** | **Function** |
| F1 | 0.5A GMT™ fuse to protect POSITION 1 |
| F2 | 0.5A GMT fuse to protect POSITION 2 |
| F3 | 0.5A GMT fuse to protect POSITION 3 |

**Procedure 1.  Mounting the 3O3D3-23L2A in a Rack**

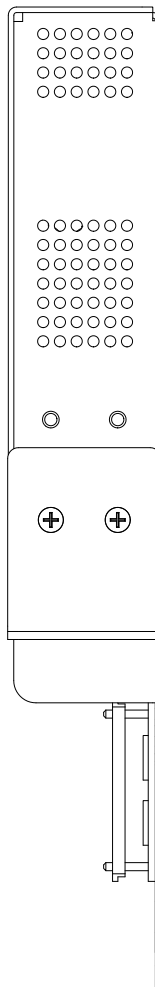| STEP | ACTION |
|---|---|
| 1 | Pulsecom supplies four #12−24 x 1/2" screws for installing the mounting in racks with corresponding holes. Otherwise, the installer will need to supply four binder-head screws of the appropriate size to fit the equipment rack mounting holes. |
| 2 | Hold the mounting in the equipment rack in the desired position. **NOTE** *It is recommended that one inch above and below the mounting be left unused for heat dissipation.* |
| 3 | Line up any two holes in the shelf with holes in the equipment rack. |
| 4 | Insert the screws through the shelf mounting holes and into the equipment rack holes. |
| 5 | Tighten the screws. |



**A.  Front View**

**Figure 2.  Mounting Views**

R1  T1     R    T
DS3 ALM | OC3 ALM
POSITION 1

R1  T1     R    T
DS3 ALM | OC3 ALM
POSITION 2

R1  T1     R    T
DS3 ALM | OC3 ALM
POSITION 3

-48V RTN     F1 F2 F3

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**B.  Top View**

**C.  Side View**

**Figure 2.  Mounting Views (Continued)**

**Procedure 2. Making Power, Ground, and Alarm Connections**

| STEP | ACTION |
|------|--------|
| 1 | Ensure that the 3O3D3-23L2A fuses are installed and that power is **not** applied to the wires that will be used to connect −48V and RTN leads to the mounting. |
| 2 | Connect frame ground to the frame ground stud using included lug and hardware. Wire size 10 AWG is recommended (12 AWG minimum, 10 AWG maximum). |
| 3 | Connect −48 VDC supply return to the RTN terminal. Wire size 22 AWG is recommended (22 AWG minimum, 14 AWG maximum). |
| 4 | Connect −48 VDC power source to the −48V terminal. Wire size 22 AWG is recommended (22 AWG minimum, 14 AWG maximum). |
| 5 | Make connections to the OC3 ALM terminals R and T for POSITION 1, POSITION 2, and/or POSITION 3, as required. Wire size 22 AWG is recommended (22 AWG minimum, 12 AWG maximum). See Figure 3 for wiring details. |
| 6 | Make connections to the DS3 ALM terminals R1 and T1 for POSITION 1, POSITION 2, and/or POSITION 3, as required. Wire size 22 AWG is recommended (22 AWG minimum, 12 AWG maximum). See Figure 3. |
| 7 | Apply power. |
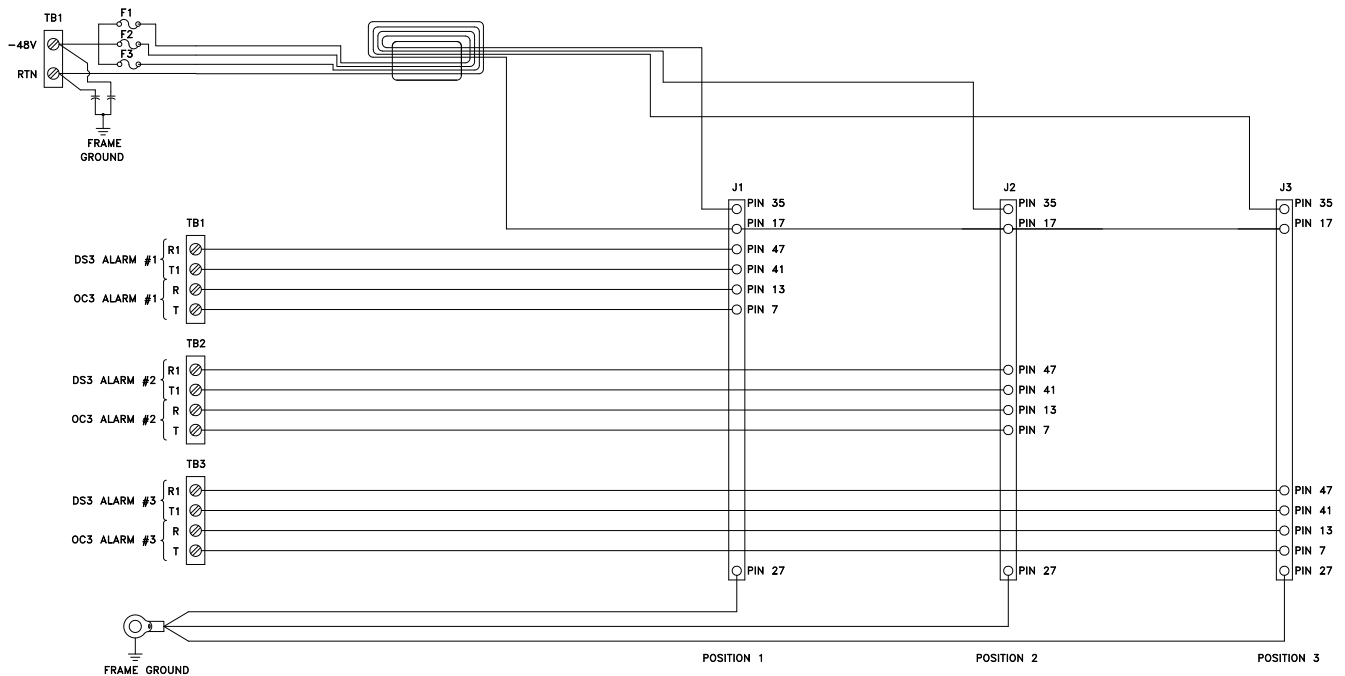


**Figure 3. 3O3D3-23L2A Wiring Diagram**

## 3. SPECIFICATIONS

Table 2 lists the electrical and physical characteristics of the mounting.

**Table 2.  3O3D3-23L2A Specifications**

| Description | Specification |
|---|---|
| **A.  Power Requirement** | |
| Input Power<br>a)  Maximum current, −48V supply<br>b)  Voltage range | 450 milliamperes (150 mA per card)<br>−42 to −57 volts |
| **B.  Environmental** | |
| Temperature Range, Operating and Storage | −40° to 65°C |
| Relative Humidity, No Condensation | 10% minimum to 95% maximum |
| Size (height x width x depth) | 1.75 x 23 x 11 inches |
| Weight, Approximate | 3 pounds |

## 4. MAINTENANCE

No routine maintenance is required.

To obtain replacement fuses, order standard GMT 0.5A fuses or Pulsecom part number 003337-0050.

## 5. CUSTOMER SERVICE

Direct questions concerning the operation of the mounting to Pulsecom Technical Support. Obtain repair services by returning the defective mounting to the Pulsecom Repair Department.