

# Rebling Datasheet: Avionics Receptacle Style 1 with High Temperature Capability

The members of Rebling's family of avionics bulkhead-mounted receptacle connectors conform to and are QPL'd to Mil Specs MS25182, MS3509, Mil-PRF-18148, Mil-E-18148 and Mil-E-81099 and are available under Rebling's Cage Code 30525. The receptacles highlighted on this datasheet are those which have high temperature capability as the termination configuration at the rear of the receptacle. Receptacles with different profiles and different rear termination options can be found on other datasheets.



## Electrical (per MIL PRF 18148)

|                                      |               |
|--------------------------------------|---------------|
| <b>Current</b>                       |               |
| Rated Current                        | 750 amps      |
| Peak Current                         | 1,500 amps    |
| <b>Voltage &amp; Resistance</b>      |               |
| Rated Voltage (DC)                   | 750 volts     |
| Dielectric Withstanding Voltage (DC) | 2,500 volts   |
| Contact Resistance (maximum)         | 60 micro-ohms |

## Mechanical (per MIL PRF 18148)

|  |  |
|--|--|
| Flammability Rating                              | UL94 HB  |
| Environmental Sealing                            | with standard Kit Components<br>with Optional Gasket |
|  | IP56<br>IP68   |
| Operating Temperature                            | -40 to +140 C°                                       |
| Mechanical Shock                                 | 20 Gs – 3 axes                                       |
| Vibration  | 10 Gs – 3 axes                                       |
| Mating Cycles (no electrical load)               | 1,500 cycles   |
| Maximum Wire Size:                               | 4/0 (110 mm <sup>2</sup> )                           |
| Maximum Terminal Lug Tongue Width                | 0.76" (19.3 mm) Maximum                              |
| Terminal Lug Web Width                           | 0.22" (5.6 mm)                                       |
| Recommended Torque on Electrical Connection Nuts | 30 - 40 in-lbs (3.4 - 4.5 Nm)                        |

## Compliance

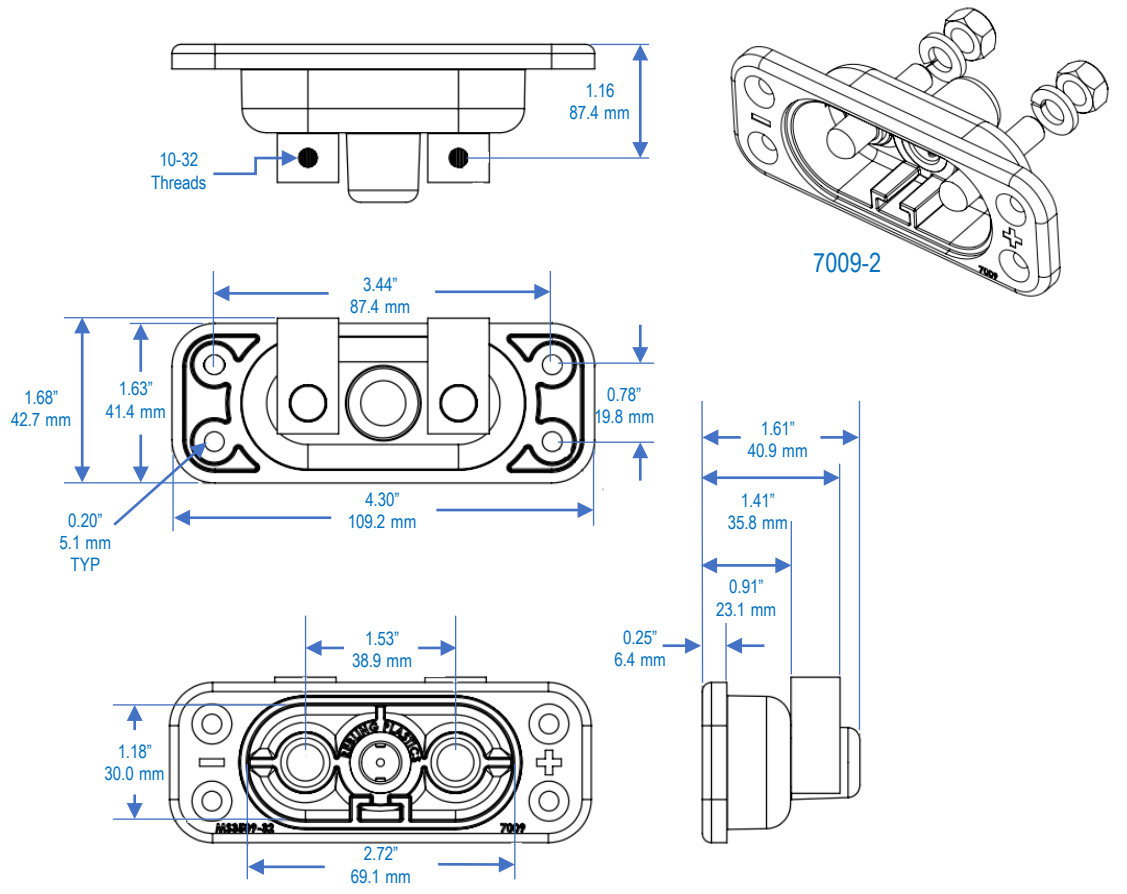
RoHS, REACH, CMRT/3TG All parts listed on this datasheet are RoHS, REACH and CMRT/3TG Compliant

## Mounting and Assembly

|  |                           |
|--|---------------------------|
| Recommended Torque on the 5/16 electrical connection nuts                  | 30-40 in-lbs (3.4-4.5 Nm) |
| Torque on the 5/16 electrical connection nuts that causes material failure | 80 in-lbs (9 Nm)          |

## Application Notes

- When attaching large cables to the rear threaded posts, use Burndy narrow tongue crimp lugs
- #8 or M4 flathead 82 degree screws are recommended for mounting the connector to the panel
- EMI Shielded Receptacles - see the datasheet for Rebling's EMI Receptacle P/N 7009-51

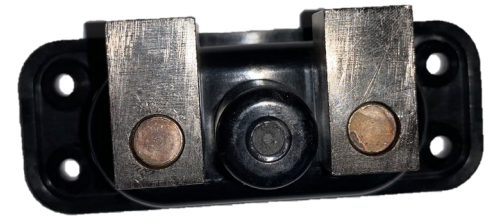


For complete dimensions, download 3D Step files of Receptacle and Accessories at [Rebling.com](http://Rebling.com)



| P/N     | Description   | Plastic Color | Weight (Grams) |
|---------|---|---------------|----------------|
| 7009-2  | Receptacle Kit, High Temp, with rear right angle -101 Adapters, Black | Black         | 182            |
| 7009-3  | Receptacle Kit, High Temp, with rear Threaded Posts, Black            | Black         | 92             |
| 7009-7  | Receptacle Kit, High Temp, with rear Threaded Posts, Brown            | Brown         | 92             |
| 7002-37 | Receptacle with no Contacts, Gray                                     | Gray          | 84             |

\*Receptacle Kit = one Receptacle + two Nuts + two Split Washers  
Gaskets and Protective Backshells can be found on the Avionics Receptacle Accessories Datasheet



Mounting Hole Pattern

