

# M81714 SERIES I

# Amphenol Pcd

Designed and qualified to MIL-T-81714, Amphenol PCD's Series I Terminal Junction Modules are robust, reliable, and always perform to highest standards. Amphenol PCD offerings cover the full SAE-AS81714 range of configurations—Feedback/Feedthrough, Electronic, In-Line Splice, Electronic Splice, and Ground. They use standard M39029/1 pin contacts and accommodate 12-26 AWG wires. Mounting rail and installation/termination accessories are available, and customization is always an option.



*Feedback, Feedthrough  
& Bussing Modules*



*Electronic Modules*



*Ground Modules*



*Single In-Line Splices  
Dual In-Line Splices  
Electronic Splices*



*Mounting Tracks*

## *Feedback, Feedthrough & Bussing Modules*

TJM and TJHD modules offer a lightweight junction system with a full range of bussing arrangements and contact sizes. TJM and TJHD modules meet M81714 requirements, and are QPL approved.

## *Electronic Modules*

TJE electronic modules offer a wide variety of diodes, resistors, capacitors and fuses in a Series I form factor. TJE modules perform to M81714 specifications. Many variations are available, and custom options are always available.

## *In-Line Splices*

Single and Dual Splices and Electronic Splices are designed to provide a quick and efficient solution to customer wiring requirements. Single and Dual Wire Splices meet MIL-T-81714/11 & /12 requirements and are highly resistant to temperature and fluids.

## *Grounding Modules*

Multi-contact grounding/bus connection modules are provided with an integral threaded grounding stud or flange. The stud and flange is electrically and mechanically common to all internal contacts of the module. The modules are dimensional identical to the equivalent MIL-T-81714/27 grounding stud modules.

## *Electronic Splices*

TJSE electronic splices can be supplied with a wide variety of diodes, resistors, capacitors, and fuses within the splice itself. TJSE electronic splices meet the electrical parameters of MIL-T-81714/21 /23 /24 and allow customers to incorporate system modifications into a wire bundle, avoiding expensive changes in panels and wire harnesses themselves.

## *Module Mounting Tracks & Brackets*

One track holds all module sizes with STD, lightweight & feed through types available. Each track unit consists of an aluminum alloy track and anodized black locking clamp. The stainless steel clamp screw is self locking to meet vibration, shock and temperature variation requirements. /29 mounting brackets also available.

# Features & Benefits

## SAE-AS81714 & MIL-T-81714

Approved Meets high quality standards

## AS39029/1 Type Contacts

Meets military specification AS39029

## Integral Bus Bar

Assures electrical and mechanical integrity over long product life  
Fewer solder joints for more reliable and repeatable electrical operation

## Integral Contacts

High conductivity allows for optimum electrical performance

## Split Socket Design

Provides peripheral surface wipe and contact  
Maximizes mating surfaces of pin and contact

## Class D Module System

Combines max high temperature and high fluid resistance performance parameters previously divided among three module classes: A, B, C

## Electronic Systems

Modules can be supplied with a variety of diode, resistors, capacitors, and fuses Meets electronic parameters of MIL-T-81714 /24 /25 /26

## Class 3B Silicone Sealant

Tear and flex resistant silicone

## Ultrasonic Bonding + Proprietary Epoxy

No bond lines and ultrasonic fusing means few voids, long field life

## Product Availability

Largest QPL availability in the industry  
Non-QPL variants and custom modules

# Technical Specifications

## Materials

**Insulator Body:** Polyetherimide, color: black

**Grommet:** Silicone elastomer, color: blue

**Contacts:** Copper alloy, gold plated

**Contact Retainers:** Stainless steel

## Performance

**Temperature Range:** -65°C to 200°C

**Insulation Resistance:**

>5000 megohms

AS81714, para 3.5.1

**Dielectric Withstanding Voltage:**

1500Vrms @ sea level

200Vrms @ 100,000 ft altitude

AS81714-para 3.5.6

**Current Ratings (By Contact Size):**

Size 22/22: 5 Amps

Size 20/20: 7.5 Amps Size 16/16: 13 Amps

Size 12/12: 23 Amps

**Vibration:** Per AS81714, para. 3.5.8

**Mechanical Shock:** Per AS81714, para. 3.5.9

# QPL & Non-QPL Coverage

|      |                        |                                      |
|------|------------------------|--------------------------------------|
| TJM  | Sz 12/16/20            | M81714/1, /2, /3, /4, /6, /7, /8, /9 |
| TJE  | Sz 12/16/20 Electronic | performs to M81714/26, /25 (non-QPL) |
| TJHD | Sz 22 Electronic       | M81714/17                            |
| TJT  | Tracks                 | M81714/5, /10, /16 (light weight)    |
| TJF  | Flange Ground          | performs to M81714/28 (non-QPL)      |
| TJG  | Stud Ground            | performs to M81714/27 (non-QPL)      |
| TJS  | Splices- Single & Dbl  | M81714/11, /12                       |
| TJSE | Electronic Splices     | M81714/21, /23, /24 (/24 non-QPL)    |

# AVAILABLE IMMEDIATELY

## NEW

### Series I Electronic Splice

M81714/21 Inline Diodes

M81714/23 Inline Fuses



Class D, QPL certified to SAE-AS81714 Use MilStd Pin Contacts

M39029/1-100 size 22

M39029/1-101 size 20

**Reliable & Proven Tried & True – Technology you can trust**