



## Introduction

JR is a series of micro-miniature high voltage cable assemblies. The series consists of 4 pin and 6 pin cable assemblies rated at 6 KVDC designed to operate at 70,000 feet altitude over a temperature range of -55 to +125°C.

The series was originally intended to interconnect low power mini-TWTs to a power supply in a Radar or ECM System. Since their introduction, these high contact density assemblies have found applications in laser systems, photo-multiplier detection systems, night vision systems and other applications where small size and a flexible cable harness is a requirement.

JR is available only as plug or receptacle cable assemblies. Each assembly is wired with our Ready-to-Bond etched FEP or silicone rubber coated cable. A braided shield or NOMEX woven jacket is optional.

JR uses the Advanced interface sealing system illustrated in figure 2 on page 11. The insulator body is a thermoplastic on both the plug and receptacle. The receptacle and plug bodies are nickel plated aluminum.

The completed cable assemblies are 100% high potential tested at 70,000 feet simulated altitude at room ambient temperature.

Excellent bond joints can be achieved in silicone encapsulation procedures when the Ready-to-Bond, silicone coated FEP cable is used. The Etched Ready-to-Bond FEP cable will yield good results when encapsulated into most epoxies and other rigid or semi-rigid potting materials.



## General Specifications

### Receptacle and Plug Bodies

Aluminum, nickel plated

### Receptacle Interface Seal

Molded silicone rubber

### Receptacle and Plug Insulators

Thermoplastic (unless otherwise noted)

### Receptacle Contact

Type: Male

Design: Spherical radius

Material: Brass, gold plated

Size: 24 (.020 Dia.)

### Plug Contact

Type: Female

Design: Split finger, closed entry

Material: BeCu, gold plate

Size: 24 (.020 Dia.)

### Cable Assemblies

Back end of connector is encapsulated with silicone rubber

### Electrical

Rated Voltage: 6 KVDC @ 70,000 feet

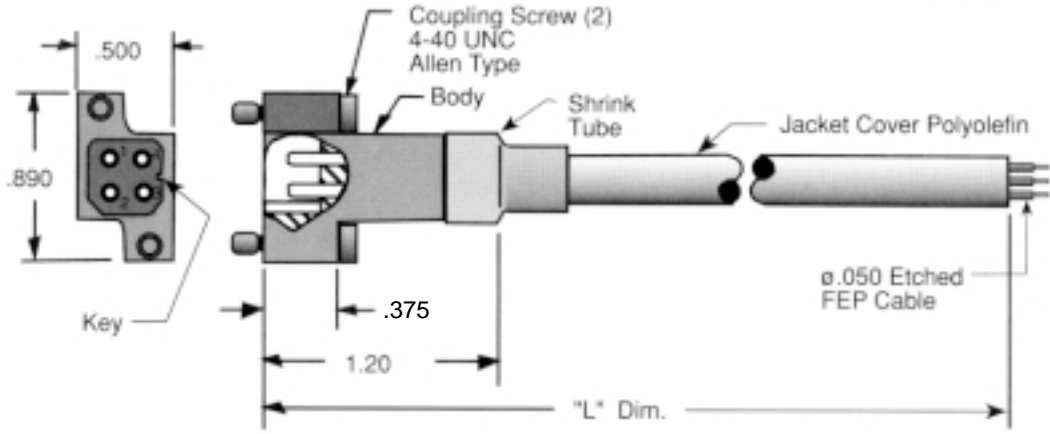
Test voltage (mated): 150% of rated voltage @ 70,000 feet

Operating temperature rating: -55° to +125° C



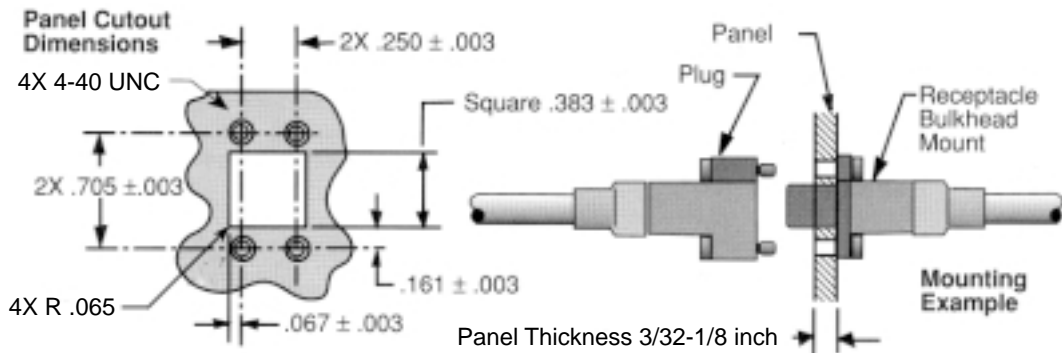
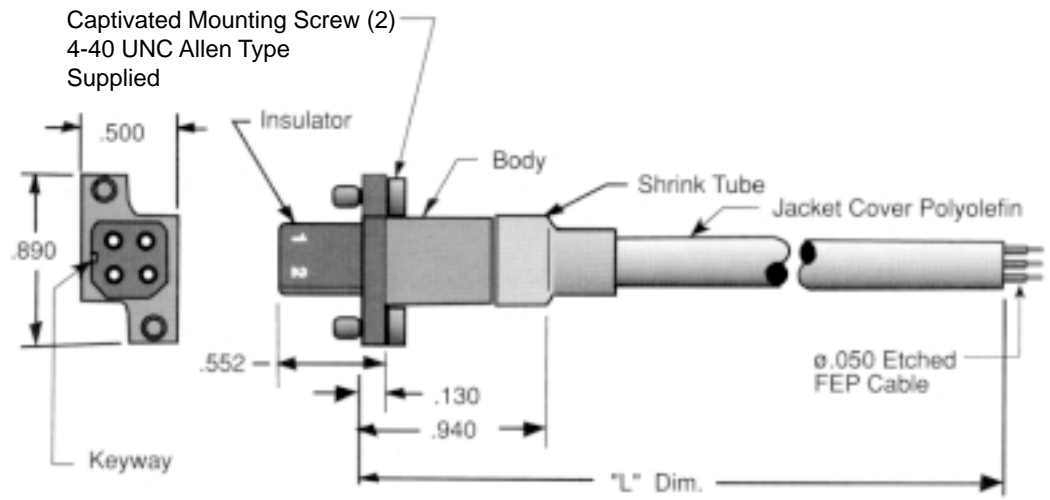
P/N 178-9718 Plug Cable Assembly

Mates P/N 178-9719 shown below



P/N 178-9719 Receptacle Cable Assembly Bulkhead Mounted

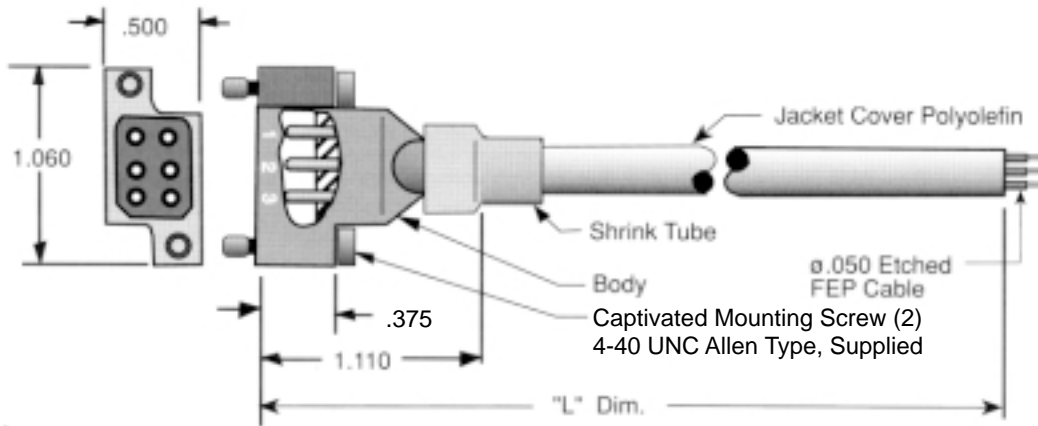
Mates P/N 178-9718 shown above





P/N 178-8363 Plug Cable Assembly

Mates P/N 178-8362 shown below



P/N 178-8362 Receptacle Cable Assembly

Mates P/N 178-8363 shown above

