



Series
1205
7.5 KVDC

Series
1407
10 KVDC

Series
1807
15 KVDC

Series 1205

These 5 pin connectors have been in production for more than 20 years and are suited for low power TWTs. Rated at 7.5 KVDC at any altitude up to 70,000 feet.

Series 1407

Rated at 10 KVDC at altitudes up to 70,000 feet, these 7 pin connectors are widely used on TWTs and TWT power supplies.

Series 1807

Rated at 15 KVDC at altitudes up to 70,000 feet, these 7 pin connectors are ideal for higher power TWTs and RADAR power supplies.



GENERAL SPECIFICATIONS

	<u>1205</u>	<u>1407</u>	<u>1807</u>
Sea Level Voltage Rating (KVDC)	7.5	10	15
70,000 foot Altitude Rating (KVDC)	7.5	10	15
Bayonet Coupling	Yes	Yes	Yes
Threaded Coupling	No	No	Yes
Bayonet Ring Diameter (inches/mm)	1.01/25.6	1.14/28.9	1.37/34.7
Insulator Material (Plug)	Sil. Rubber	Sil. Rubber	Sil.Rubber
Insulator Material (Receptacle)	Sil. Rubber**	Sil. Rubber**	DAP*
Coupling and Body Material/finish	Alum./nickel	Alum./nickel	Alum./nickel
Bayonet Coupling Finish/lubricant	Nickel/dry lube	Nickel/dry lube	Nickel/dry lube
Male Contact Diameter (inches/mm)	0.040/1.01	0.052/1.32	0.060/1.52
Male Contact Material/finish	Brass/gold	Brass/gold	Brass/gold
Female Contact Material/finish	BeCu/gold	BeCu/gold	BeCu/gold
Hooded Female Contact	Yes	Yes	Yes
Front and Rear Mount Receptacles Available	Yes	Yes	Yes
Uses FEP Wire or Type 'L' Cable	Yes	Yes	Yes
100% test voltage @ 70,000 feet simulated and at ambient temperature	10 KVDC	15 KVDC	22.5 KVDC

*Diallyl Phthalate Plastic ** Also available in ULTEM™



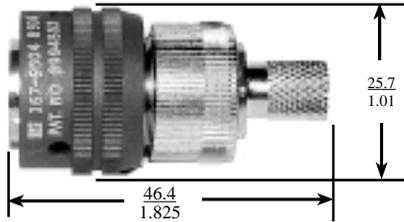
Series

1205

7.5 KVDC Bayonet Coupling

Altitude Rated Operating Temperature: -55°C to +105°C

5 Pin Plug (male)



P/N 167-9504 Shielded version (shown)

P/N 167-9509 Non-shielded version

Cable connector (Male). Bayonet coupling
Altitude rated (up to 70,000 Ft.)

Operating temperature: -55°C to +105°C

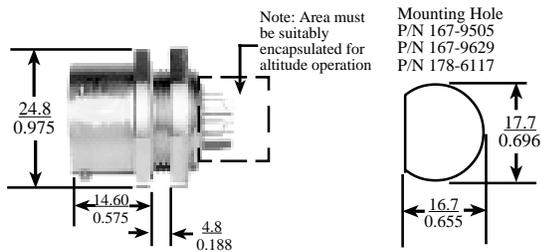
Cable type (Shielded Version): Uses individually shielded .080 Dia. type "L" cable **P/N 167-9346** with crimp braid termination. T&B crimp tool WT 218 (or equivalent) is required.

Cable Type (non-shielded version): Individual 0.080 Dia. FEP wires **P/N 167-9543**

Mating connectors: Mates all series 1205 receptacles
[Plug assembly instructions \(non-shielded version\)](#)

[General Specifications](#)

5 Pin Front Mount Receptacle (female)



P/N 167-9505 Silicone rubber insulator

P/N 178-6117 Ultem™ plastic insulator

Sealed receptacle

Altitude operation: Up to 70,000 Ft. when suitably encapsulated or immersed in dielectric fluid

Operating temperature: -55°C to +105°C

Pressure: 100% leak tested at 1 atmosphere differential pressure to 1 X 10⁻⁶ cc/sec. He.

Mating connectors: All series 1205 plug cable assemblies

[General Specifications](#)

5 Pin Rear Mount Receptacle (Female)

P/N 167-8919 Silicone rubber insulator (not illustrated)

Sealed receptacle

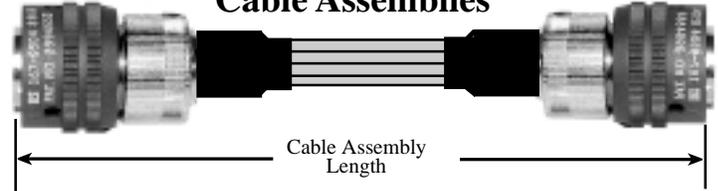
Altitude operation: Same as 167-9505/178-6117 shown above

Pressure: Same as 167-9505/178-6117 shown above

Mating connectors: All series 1205 cable assemblies

[General Specifications](#)

Cable Assemblies



Double Ended Cable Assemblies

P/N 167-9630 5 pin cable assembly shielded (shown)

P/N 167-9631 5 pin cable assembly non-shielded (not shown)

Single Ended Cable Assemblies

P/N 167-9627 5 pin cable assembly shielded (not shown)

P/N 167-9628 5 pin cable assembly non-shielded (not shown)

Altitude rated (up to 70,000 Ft.)

Operating temperature: -55°C to +105°C

Crimp braid termination (for shielded assemblies)

Bayonet coupling

Cable type: Shielded version uses individual shielded .080 type 'L' cable **P/N 167-9346**. Non-shielded version uses .080 Dia. FEP etched wire **P/N 167-9543**

Mating Connectors: Mates all series 1205 receptacles

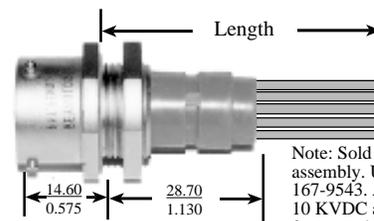
[General Specifications](#)

[Bulk cable: Ordering and specifications](#)

Note: See cable assembly ordering information below

5 Pin Front Mount Receptacle (female)

Pre-wired and 100% altitude tested



Note: Sold only as a pre-wired, pre-tested assembly. Uses 0.080 Dia. FEP cable P/N 167-9543. Assemblies are 100% tested to 10 KVDC at a simulated altitude of 70,000 feet at ambient room temperature

P/N 167-9629 Front mount (jam nut).

Sealed receptacle

Altitude operation: Up to 70,000 Ft. No potting required

Operating temperature: -55° to +105°C

Pressure: 100% leak tested at 1 atmosphere differential pressure to 1 X 10⁻⁶ cc/sec. He.

Mating connectors: All series 1205 plug cable assemblies

[General Specifications](#)

Note: See cable assembly ordering information below

Cable Assembly Ordering information

Order by Part Number

Use "F" for feet, "N" for inches.

Example: Cable Assembly 178-7034 10 feet 8 inches in length, is ordered as **P/N 178-7034-10F-8N**



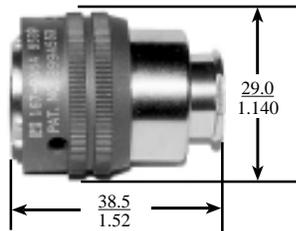
Series

1407

10 KVDC
Bayonet Coupling

Altitude Rated
Operating Temperature:
-55°C to +105°C

7 Pin Plug (male)



P/N 167-9454 Shielded version (shown)

P/N 167-9571 Non-shielded version

Cable Connector (Male). Bayonet coupling.

Altitude Rating: Up to 70,000 Ft.

Operating Temperature: -55°C to +105°C

Cable Type (Shielded version): Individually shielded type 'L' cable **P/N 167-8726**

Cable Type (Non-shielded Version): 0.100 Dia. FEP wire

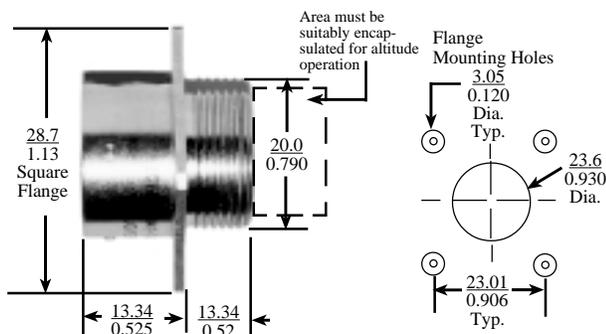
P/N 167-9609

[Plug assembly instructions](#)

[General Specifications](#)

Ordering: Specify Part Number

7 Pin Receptacle (female)



P/N 167-9455 Silicone Rubber Insulator

P/N 178-8996 Ultem™ Plastic Insulator

Altitude Rating: Up to 70,000 Ft. with rear encapsulation

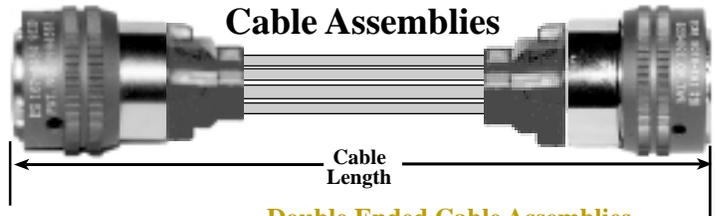
Operating Temperature: -55°C to +105°C

Mating Connectors: Mates all Series 1407 Plugs and Plug cable assemblies

[General Specifications](#)

Ordering: Specify Part Number

Cable Assemblies



Double Ended Cable Assemblies

P/N 167-9618 7 pin cable assembly shielded (shown)

P/N 167-9607 7 pin cable assembly non-shielded (not shown)

Single Ended Cable Assemblies

P/N 167-9586 7 pin cable assembly shielded (not shown)

P/N 167-9603 7 pin cable assembly non-shielded (not shown)

Altitude rating : Up to 70,000 Feet

Operating temperature: -55° to +105°C

Bayonet coupling

Cable type: Shielded version uses individual shielded 0.100 type 'L' cable **P/N 167-8726** (shown). Non-shielded version uses 0.100 Dia. FEP etched wire **P/N 167-9609**

Mating Connectors: Mates all series 1407 panel connectors

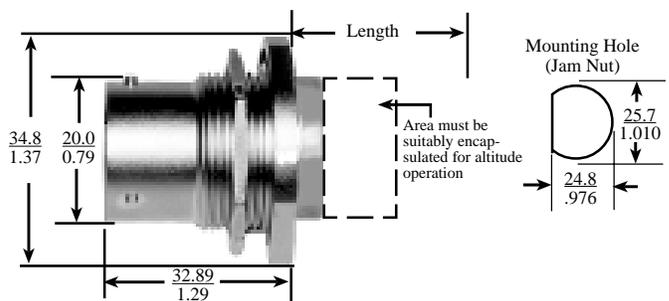
[Bulk cable](#)

[General Specifications](#)

Ordering: See cable assembly ordering information below

7 Pin Receptacle (female)

Pre-wired and 100% altitude tested



P/N 167-8625 Sealed. Rear mount/Jam nut receptacle

Insulator: Silicone rubber

Altitude rating: Up to 70,000 Ft.

Operating temperature: -55°C to +105°C

Mating connectors: Mates all series 1407 plugs and plug cable assemblies

[General Specifications](#)

Cable Assembly Ordering information

Order by Part Number

Use "F" for feet, "N" for inches.

Example: Cable Assembly 178-7034 10 feet 8 inches in length, is ordered as **P/N 178-7034-10F-8N**



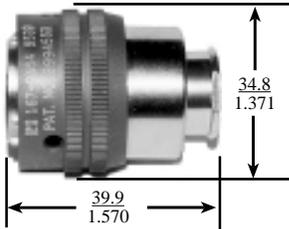
Series

1807

15 KVDC
Bayonet Coupling

Altitude Rated
Operating Temperature:
-55°C to +105°C

7 Pin Plug (male)



P/N 167-9708 Shielded version (shown)

P/N 167-9709 Non-shielded version

Cable Connector (Male). Bayonet coupling.

Operating Temperature: -55°C to +105°C

Cable Type (Shielded version): Individually shielded type 'L' cable **P/N 167-9346**

Cable Type (Non-shielded Version): 0.080 Dia. FEP wire

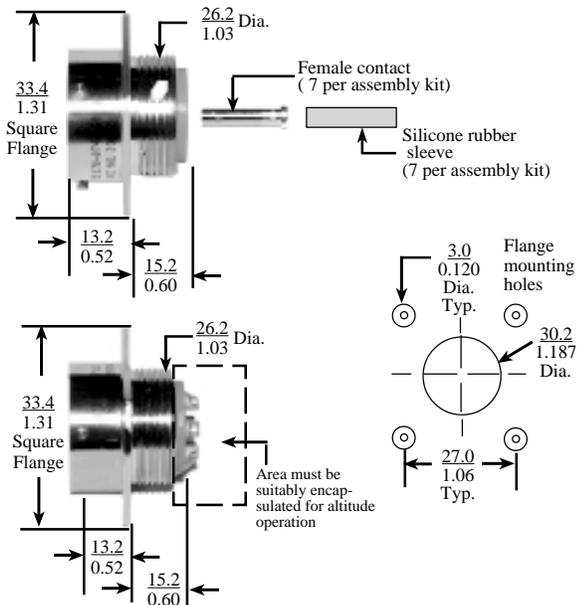
P/N 167-9543

[Plug assembly instructions \(non-shielded version only\)](#)

[General Specifications](#)

[Bulk cable ordering and specifications](#)

7 Pin Receptacles (Female) Front Mount



P/N 178-8741 Kit. Front Mount/Box Flange (shown top)

Plastic insulator and loose contacts. 7 female contacts

P/N 167-9712 Front Mount/Box Flange (shown bottom)

Plastic insulator. Contacts molded in place. 7 female contacts

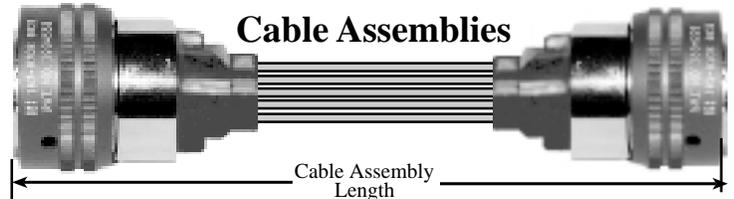
Operating Temperature: -55°C to +105°C

Mating Connectors: Mates all bayonet coupled Series 1807 Plugs and Plug cable assemblies

Insulator Material: Plastic

[Kit assembly instructions](#)

[General Specifications](#)



Cable Assemblies

Double Ended Cable Assemblies

P/N 167-9715 7 pin cable assembly shielded (shown)

P/N 167-9716 7 pin cable assembly non-shielded (not shown)

Single Ended Cable Assemblies

P/N 167-9718 7 pin cable assembly shielded (not shown)

P/N 167-9719 7 pin cable assembly non-shielded (not shown)

Altitude Rated (up to 70,000 Ft.)

Operating temperature: -55°C to +105°C

Cable Type: Shielded version uses individual shielded 0.080 type 'L' cable **P/N 167-9346**. Non-shielded version uses 0.080

Dia. FEP wire **P/N 167-9543**

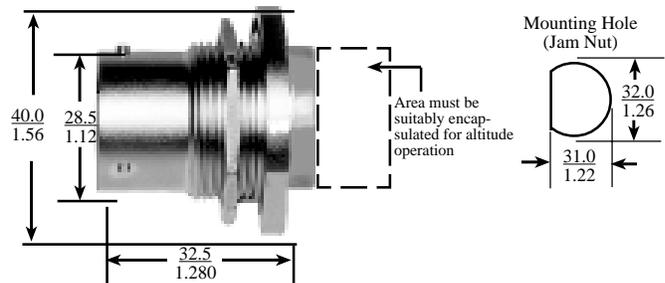
Mating Connectors: Mates all series 1807 bayonet receptacles

[Bulk cable: Ordering and specifications](#)

[General Specifications](#)

Ordering: See cable assembly ordering information below

7 Pin Receptacle (female)



P/N 167-8666 Sealed. Rear mount/Jam nut receptacle

Insulator: Plastic

Altitude Rating: Up to 70,000 Ft.

Operating Temperature: -55°C to +105°C

Pressure: Helium leak tested at 1 atmosphere differential pressure. Leakage not to exceed

1 X 10⁻⁶ cc/sec. He. Assemblies are 100% leak tested.

Mating Connectors: Mates all bayonet coupled series 1807 plugs and plug cable assemblies

[General Specifications](#)

Cable Assembly Ordering information

Order by Part Number

Use "F" for feet, "N" for inches.

Example: Cable Assembly 178-7034 10 feet 8 inches in length, is ordered as **P/N 178-7034-10F-8N**



Series

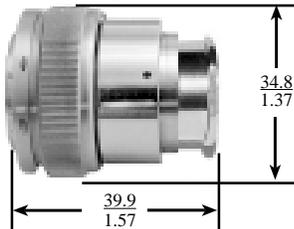
1807

15 KVDC
Threaded Coupling

Altitude Rated

Operating Temperature:
-55°C to +105°C

7 Pin Plug Connectors (male)



P/N 167-9691 Shielded version (shown)

P/N 167-9693 Non-shielded version

Cable connector (male). Threaded coupling.

Altitude rating: Up to 70,000 Ft.

Operating temperature: -55°C to +105°C

Cable type (shielded version): Individually shielded type 'L' cable **P/N 167-9346**

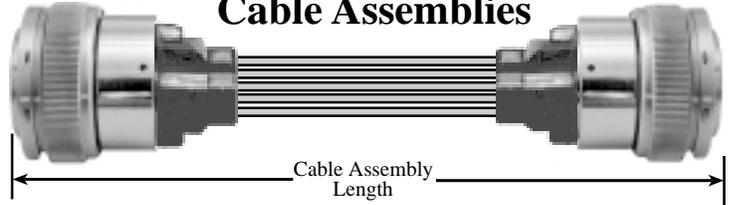
Cable type (non-shielded version): 0.080 Dia. FEP wire **P/N 167-9543**.

[Plug assembly instructions \(non-shielded version only\)](#)

[General Specifications](#)

Ordering: Specify Part Number

Cable Assemblies



Double Ended Cable Assemblies

P/N 167-9722 7 pin cable assembly shielded (shown)

P/N 167-9723 7 pin cable assembly non-shielded (not shown)

Single Ended Cable Assemblies

P/N 167-9726 7 pin cable assembly shielded (not shown)

P/N 167-9727 7 pin cable assembly non-shielded (not shown)

Altitude rated (up to 70,000 Ft.)

Operating temperature: -55°C to +105°C

Threaded coupling

Cable type: Shielded version uses individual shielded 0.080 type 'L' cable **P/N 167-9346**. Non-shielded version uses 0.080 Dia. FEP wire **P/N 167-9543**

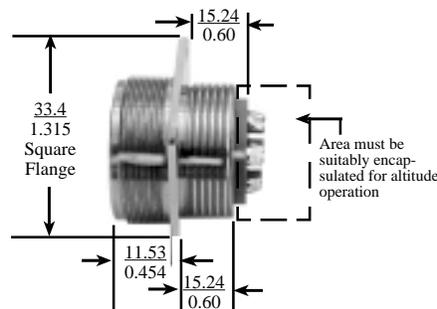
Mating connectors: Mates all series 1807 threaded receptacles

[Bulk cable ordering and specifications](#)

[General Specifications](#)

Ordering: See cable assembly ordering information below

7 Pin Box Flange Receptacle (female)



P/N 167-9711 Front mount receptacle

Insulator: Plastic

Altitude rating: Up to 70,000 Ft.

Operating temperature: -55°C to +105°C

Mating connectors: Mates all series 1807 threaded plugs and plug cable assemblies

Cable Assembly Ordering information

Order by Part Number

Use "F" for feet, "N" for inches.

Example: Cable Assembly 178-7034 10 feet 8 inches in length, is ordered as **P/N 178-7034-10F-8N**