

# Amphenol

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## QDS CONNECTORS



QDS Connector Family

Amphenol manufactures a family of QDS connectors used in medium-sized applications with a 50Ω impedance requirement.

The connector utilizes a positive-locking, push-on coupling interface. It is quick mating, ideal for tight spaces and used where a torque wrench is not practical.

These connectors are excellent for applications where power handling and low intermodulation are required.

As with all Amphenol “customer-driven designs”, the QDS series connectors incorporate practical and unique features that make your design and assembly process easier.

### Applications:

- Base Stations
- Cable Assemblies
- Components (Filters)
- Switching Equipment
- Telecom

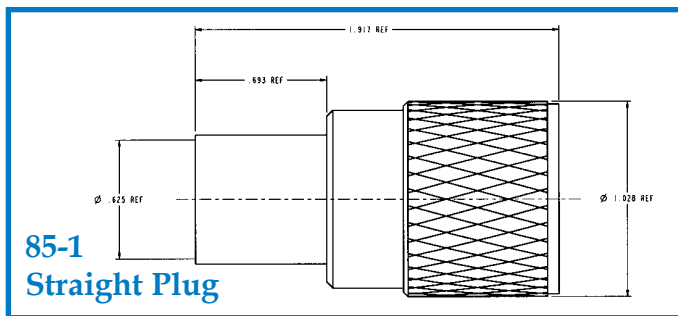
### Ordering Information:

Type	Cable	Part No.*
Straight Plug	LMR 600	85-1
Right Angle Plug	LMR 600	85-2
Panel Receptacle Jack	N/A	85-3
Bulkhead Jack	Harbour RG142	85-4

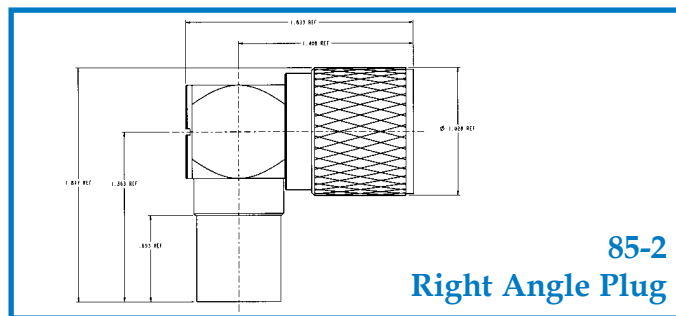
\*Above part numbers represent white bronze plating only.

Features	Benefits
Push-Pull Coupling	Allows quick installation and safe coupling
Push-pull plugs can be mated with standard QDS jacks and receptacles	Reduces inventory
Available in white bronze or silver	White bronze (tin/zinc/copper) is tarnish and corrosion resistant
Low insertion force <10N	Offers smooth insertion and safe mating with surface mount devices
Crimp center contact and outer ferrule	Allows quick installation
Durable and rugged design	500 + mating cycles

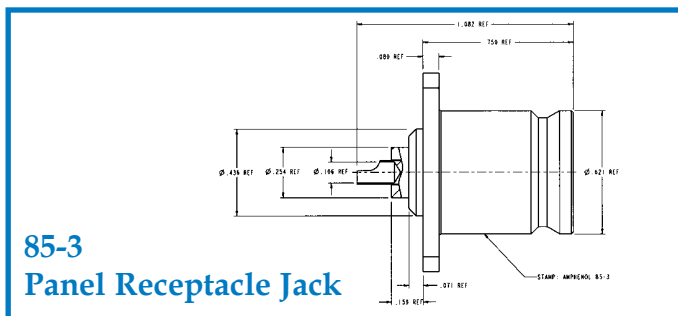
# QDS CONNECTORS



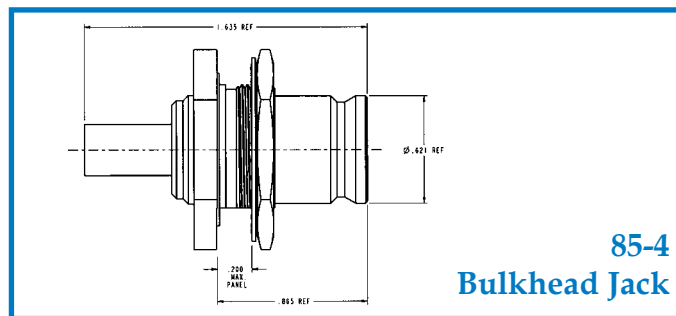
**85-1**  
Straight Plug



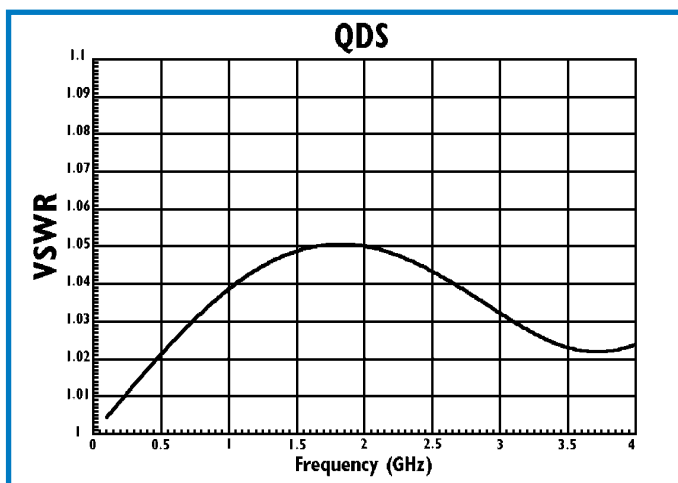
**85-2**  
Right Angle Plug



**85-3**  
Panel Receptacle Jack



**85-4**  
Bulkhead Jack



## Specifications:

### Electrical:

Impedance	50 $\Omega$
Frequency range	0-4 GHz (recommended) 0-11 GHz (usable)
Voltage rating	1000 volts peak
Withstanding voltage	$\leq 750$ V
VSWR	
Straight	1.10 max. (0 to 4 GHz)
Contact resistance	
Center	$\leq 6$ m $\Omega$
Outer	$\leq 3$ m $\Omega$
Insulation resistance	$\leq 10$ G $\Omega$
Insertion loss	$\leq 0.8$ dB

### Mechanical:

Mating	QDS coupling
Connector affixment to cable	Crimp
Cable affixment to center contact	Crimp
Contact captivation	Yes

### Environmental:

Temperature range	-40°C to +85°C
Vibration	MIL-STD 202, Method 204, Condition A
Shock	MIL-STD 202, Method 107, Condition B
Corrosion	MIL-STD 202, Method 101, Condition B
Moisture resistance	MIL-STD 202, Method 106

### Material:

Body, plating	Brass, white bronze or silver
Center contacts	
Female	BeCu, gold plated
Male	Brass, gold plated
Insulators	Teflon
Crimp ferrules	Copper, white bronze or silver

**Amphenol**<sup>®</sup>

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