

Description

UHF - Invented in the 1930's by an Amphenol engineer, E. Clark Quackenbush, for use in the radio industry.

UHF coaxial connectors are general purpose units developed for use in low frequency systems from 0.6 to 300 MHz.

UHF is an acronym for "Ultra High Frequency". When the UHF was introduced, 300 MHz was considered High Frequency.

The coupling on a UHF is threaded.

Since UHF connectors are low cost, the impedance is variable.

Features/Benefits

- Optional reducing adapters accommodates a wide range of popular coaxial cables.
- Solder termination types require no special assembly tools.
- Crimp termination type connector available provides a lower cost installation method.
- Large size threaded coupling - rugged design.
- Non-demanding specifications and low cost.

Applications

- Antennas
- Cable Assemblies
- CB Radios
- Low Frequency Applications
- Public Address Systems



UHF

Specifications	186
Plugs, Reducing Adapters	187-188
Receptacles	189
Adapters/Hoods	190
Cap & Chain	191

ELECTRICAL

Impedance	Non-constant
Frequency range	0-300MHz
Voltage rating	500 volts peak

MECHANICAL

Mating	5/8-24 threaded coupling
Cable affixment	Braid solder, set screw, clamp and crimp

ENVIRONMENTAL

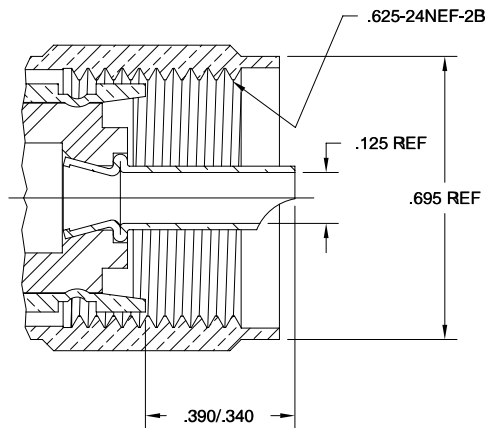
Temperature range	Mica-filled phenolic insulators: - 55°C to + 149°C Copolymer of styrene and polystyrene: - 55°C to + 85°C TFE insulators: - 65°C to + 165°C
Weatherproof	Except as noted, all series UHF are non-weatherproof

MATERIAL

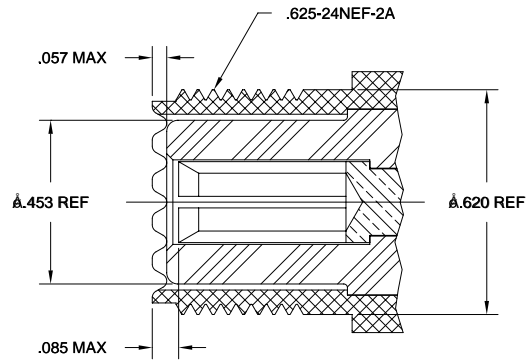
Contacts	Male: brass; silver plated Female: beryllium copper, silver plated
Bodies	Brass and die cast zinc
Other metal parts	Brass
Plating	Nickel and silver
Insulators	TFE, copolymer of styrene, polystyrene, mica-filled phenolic and PBT polyester or equal

NOTE: These characteristics are typical and may not apply to all connectors.

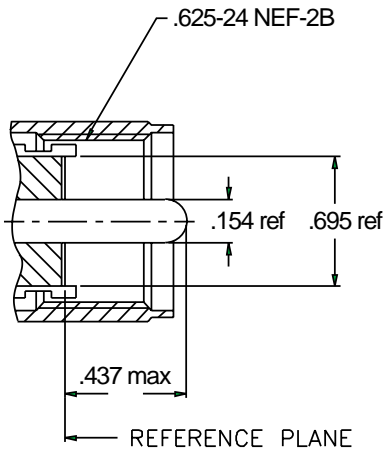
PLUG

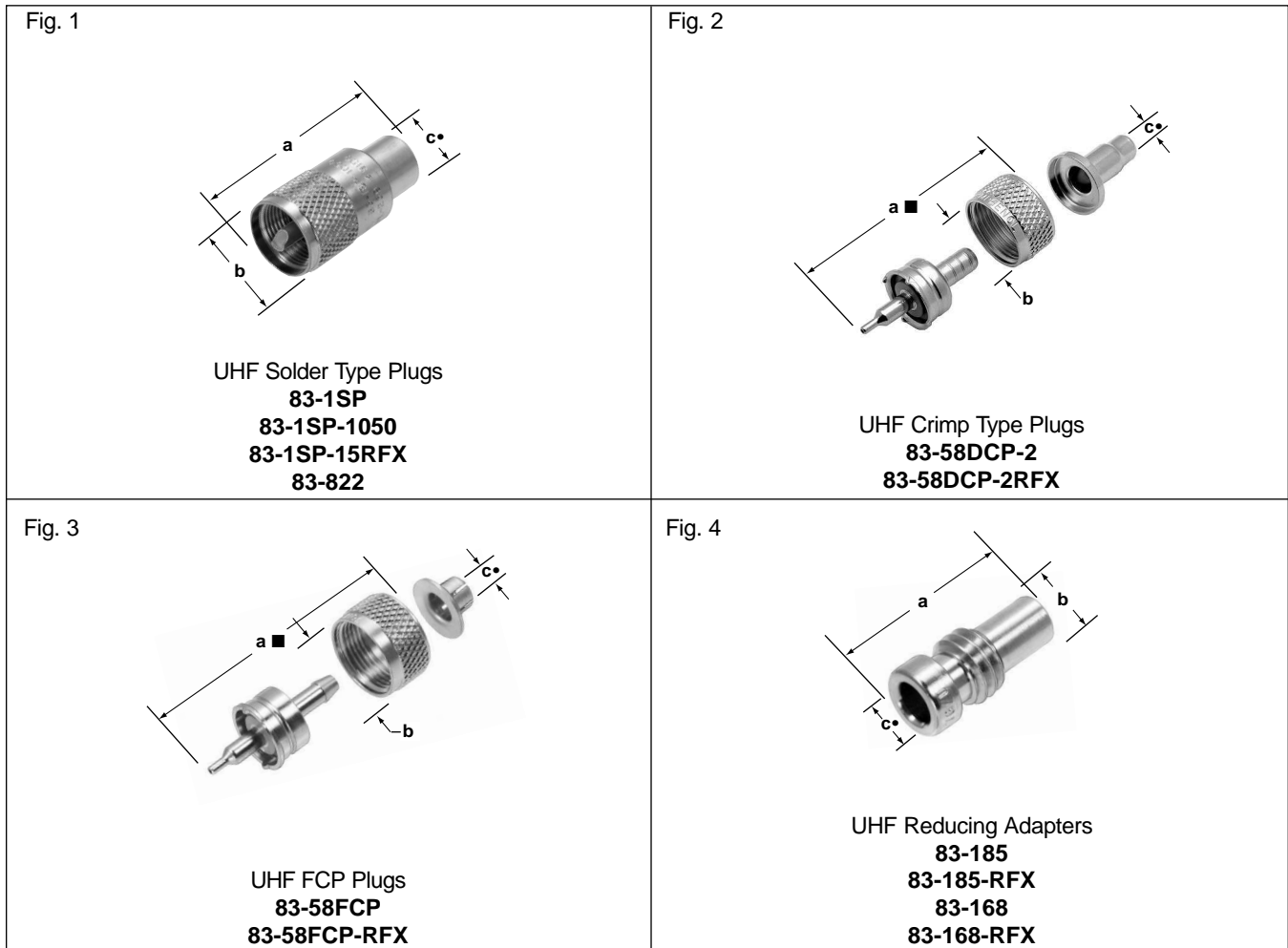


JACK



OR

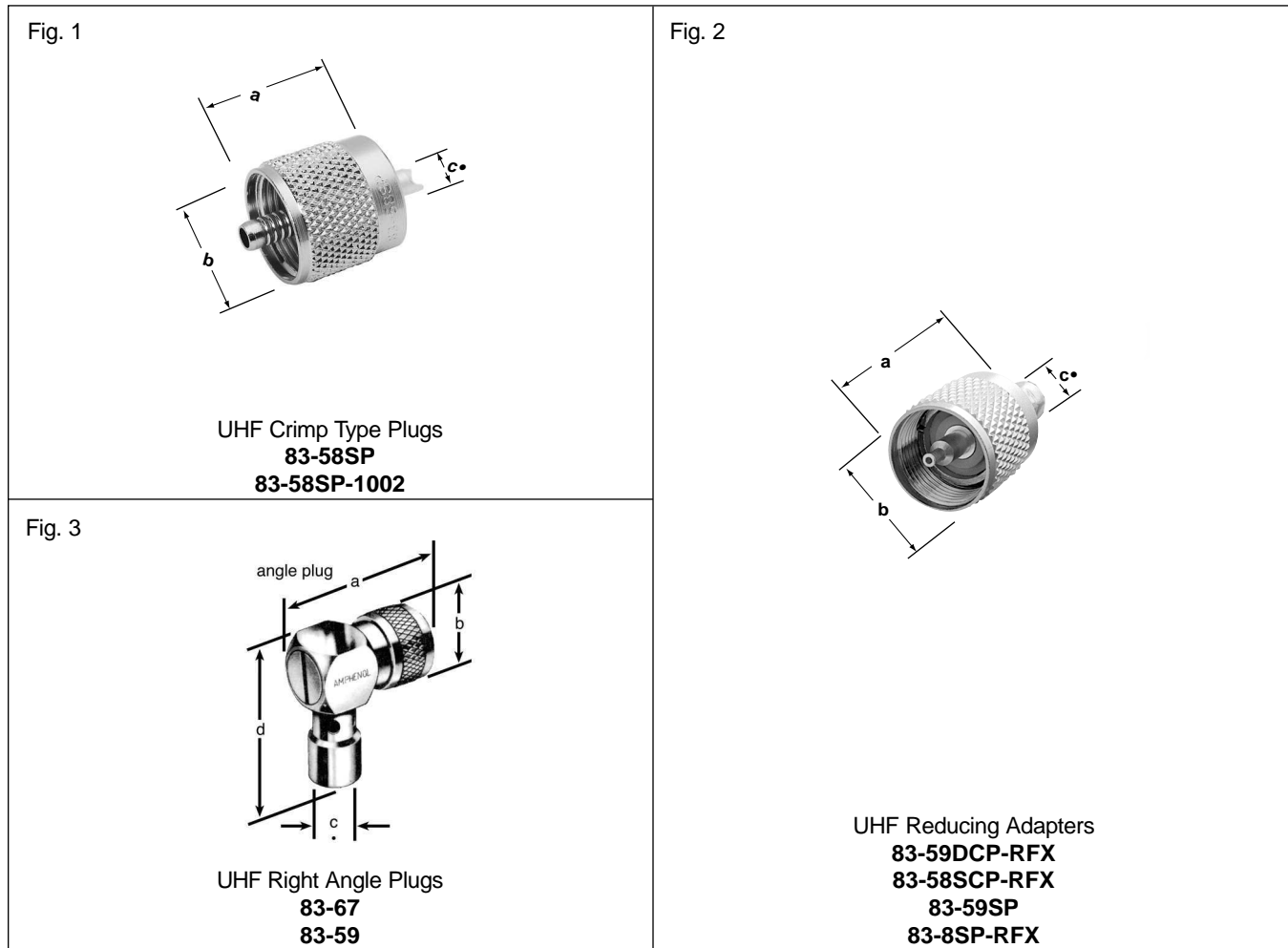




UHF CABLE PLUGS, REDUCING ADAPTERS

Cable RG-/U	Conn Type	Cable Attachment		Dimensions, inches (millimeters)			Construction Notes				Military Number	Amphenol Number	Fig.
		Outer	Inner	a	b	c •	CAI	Plt.	Ins.	Other			
8, 9, 11, 13, 63, 87A, 149, 213, 214, 216, 225	Plug	Solder	Solder	1.50(38.0)	.750(19.0)	.444(11.3)	C1, C2	P4	D3	—	PL-259	83-1SP	1
	Plug	Solder	Solder	1.50(38.0)	.750(19.0)	.444(11.3)	C1, C2	P1	D30	IBM 460147	PL-259	83-1SP-1050	1
	Plug	Solder	Solder	1.50(38.0)	.750(19.0)	.420(10.7)	C1, C2	P1	D24	—	—	83-1SP-15RFX	1
	Plug	Solder	Solder	1.50(38.0)	.750(19.0)	.444(11.3)	C1, C2	P1	D1	TFE Insulation	PL-259	83-822	1
58, 141	Plug	Crimp	Crimp	1.41(35.7)■	.750(19.0)	.245(6.2)	C5	P2	D2	—	—	83-58DCP-2	2
	Plug	Solder	Crimp	1.38(35.1)	.716(18.2)	.212(5.4)	C5	P1	D24	—	—	83-58DCP-2RFX	2
	Plug	FCP	Pliers	1.06(27.0)■	.750(19.0)	.195(4.9)	C6	P2	D2	No Soldering	—	83-58FCP □	3
	Plug	FCP	Pliers	1.16(29.4)■	.716(18.2)	.224(5.7)	C6	P7	D24	No Soldering	—	83-58FCP-RFX	3
59, 62, 140, 210	Plug	Solder	Solder	1.68(42.9)	.781(19.8)	.257(6.6)	C2	P1	D30	—	UG-111/U	83-750	1
Reducing Adapter For use on RG-55, 58, 141, 142 Cable (Except 55A)				1.00(25.4)	.438(11.1)	.209(5.3)	C2	P3	—	—	UG-175/U	83-185	4
				1.00(25.4)	.437(11.1)	.209(5.3)	C2	P3	—	—	—	83-185-RFX	4
Reducing Adapter For use on RG-59, 62, 71, 140, 210 Cable				1.00(25.4)	.438(11.1)	.257(6.5)	C2	P3	—	—	UG-176/U	83-168	4
				1.00(25.4)	.437(11.1)	.257(6.5)	C2	P3	—	—	—	83-168-RFX	4

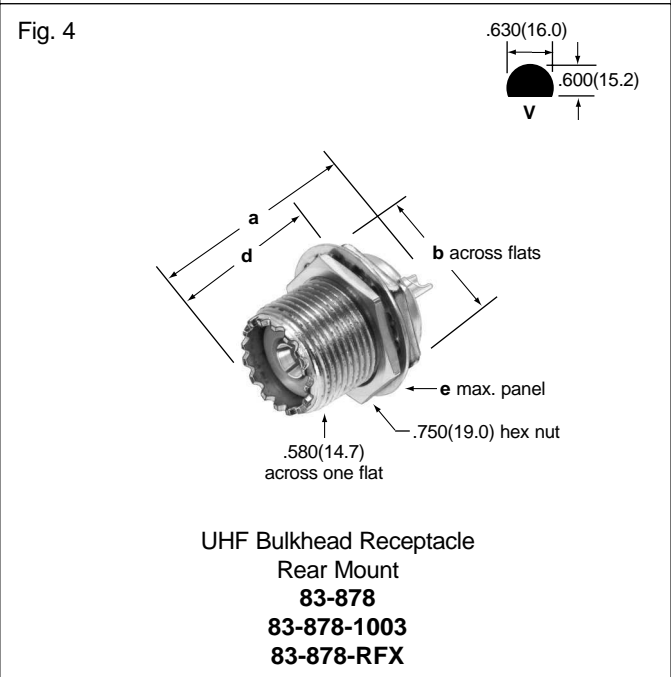
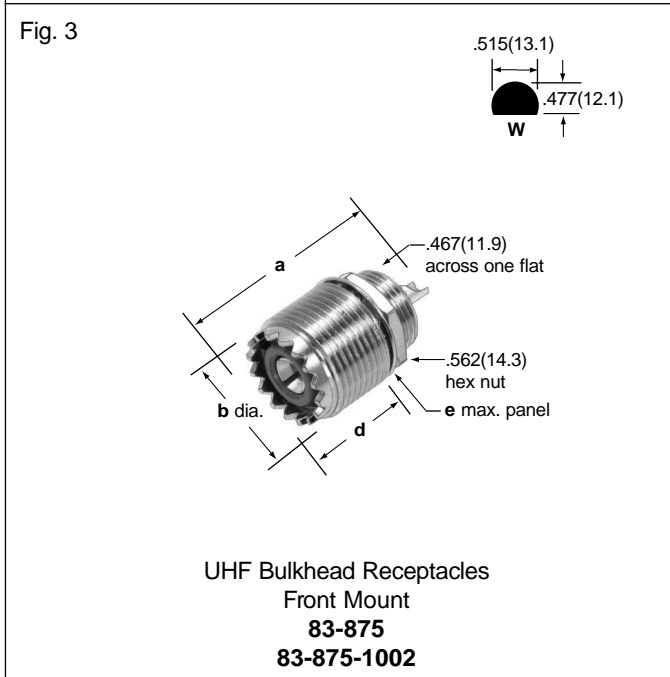
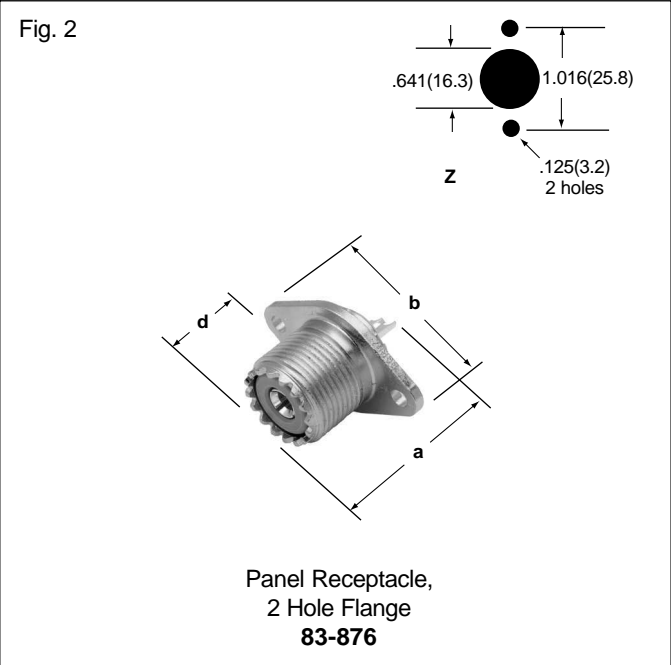
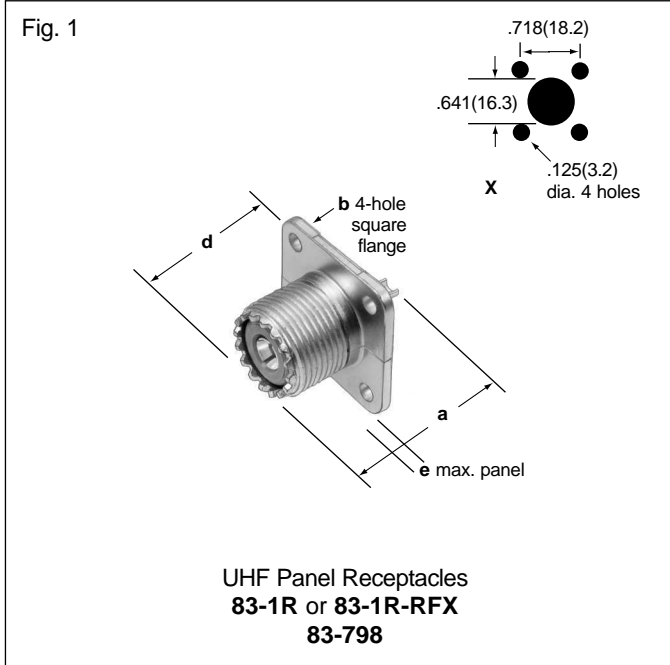
• accommodates cable diameter ▲ distributor stocked ■ includes outer ferrule □ US patent 4,053,200



UHF CABLE PLUGS, REDUCING ADAPTERS

Cable RG-/U	Conn Type	Cable Attachment		Dimensions, inches (millimeters)			Construction Notes				Military Number	Amphenol Number	Fig.
		Outer	Inner	a	b	c •	CAI	Pit.	Ins.	Other			
58, 142	Plug	Crimp	Solder	1.31(33.3)■	.750(19.0)	.206(5.3)	C4	P1	D30		—	83-58SP	1
400	Plug	Crimp	Solder	1.31(33.3)	.750(19.0)	.206(5.3)	C4	P1	D1	Teflon Insulation	—	83-58SP-1002	1
59	Plug	Crimp	Solder	1.39(35.4)	.716(18.2)	.257(6.6)	C4	P1	D24		—	83-59DCP-RFX	2
58	Plug	Crimp	Solder	1.39(35.4)	.716(18.2)	.206(5.3)	C4	P1	D24		—	83-58SCP-RFX	2
59	Plug	Crimp	Solder	1.39(35.4)	.716(18.2)	.257(6.6)	C4	P1	D3		—	83-59SP	2
8	Plug	Crimp	Solder	1.39(35.4)	.716(18.2)	.429(10.9)	C4	P1	D24		—	83-8SP-RFX	2
8, 9, 11, 13, 63, 87A, 149, 213, 214, 216, 225	R/A Plug	Solder	Solder	1.37(34.9)	.750(19.0)	.444(11.3)	C1	P1	D1	Teflon Insulation	—	83-67	3
	R/A Plug	Solder	Solder	1.37(34.9)	.750(19.0)	.444(11.3)	C1	P1	D6	Styrene Insulation	—	83-59	3

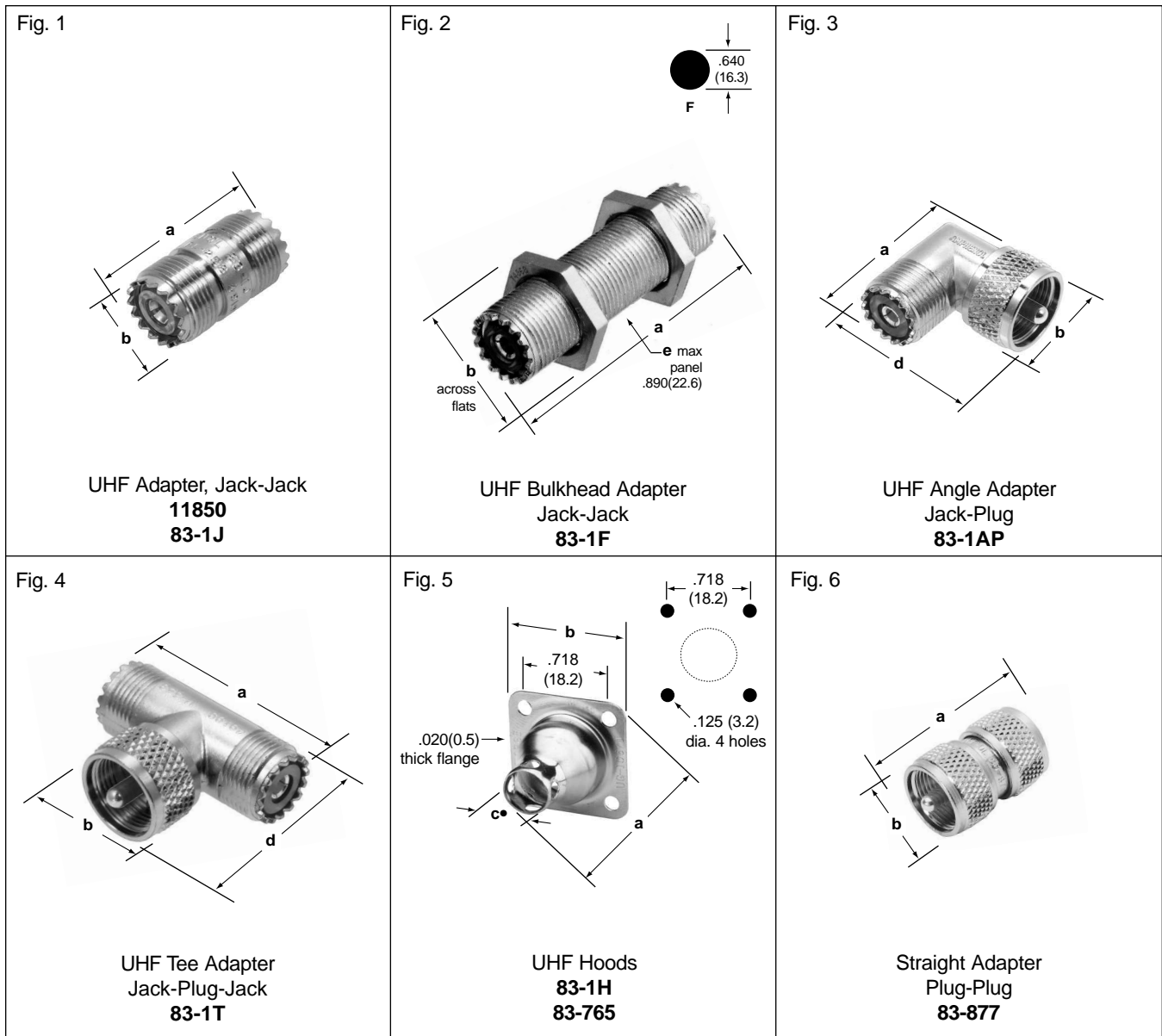
• accommodates cable diameter ▲ distributor stocked ■ includes outer ferrule □ US patent 4,053,200



UHF PANEL & BULKHEAD RECEPTACLES

Description	Dimensions, inches (millimeters)				Plt.	Ins.	Mtg. Hole	Military Number	Amphenol Number	Fig.
	a	b	d	e						
Panel Receptacle, Solder Cup 4-hole Square Flange	1.05(26.8)	1.00(25.4)	.553(14.0)	.187(4.7) ▼	P1	D2	X	SO-239	83-1R★	1 ▲
Panel Receptacle	1.06(27.0)	1.00(25.4)	.553(14.0)	.187(4.7) ▼	P1	D25	X	—	83-1R-RFX★	1 ▲
Panel Receptacle	1.05(26.8)	1.00(25.4)	.553(14.0)	.187(4.7) ▼	P1	D1	X	SO-239A	83-798	1 ▲
Panel Receptacle, Oval Flange	1.05(26.8)	1.30(32.9)	.553(14.0)	.187(4.7) ▼	P1	D2	Z	—	83-876	2 ▲
Bulkhead Receptacle Front Mount	1.09(27.8)	.563(14.3)	.500(12.7)	.156(4.0)	P1	D1/D6	W	—	83-875	3 ▲
Front Mount Bulkhead Type; Solder Cup Term.	1.09(27.8)	.563(14.3)	.500(12.7)	.156(4.0)	P1	D1	W	—	83-875-1002	3 ▲
Rear Mount Bulkhead Type; Solder Cup Term.	1.06(27.0)	.750(19.1)	.590(15.0)	.187(4.7)	P1	D2	V	—	83-878	4 ▲
Rear Mount Bulkhead Type; Solder Cup Term.	1.06(27.0)	.750(19.1)	.590(15.0)	.187(4.7)	P1	D1	V	—	83-878-1003	4 ▲
Rear Mount Bulkhead Type; Solder Cup Term.	1.06(27.0)	.750(19.1)	.590(15.0)	.187(4.7)	P1	D1	V	—	83-878-RFX	4 ▲

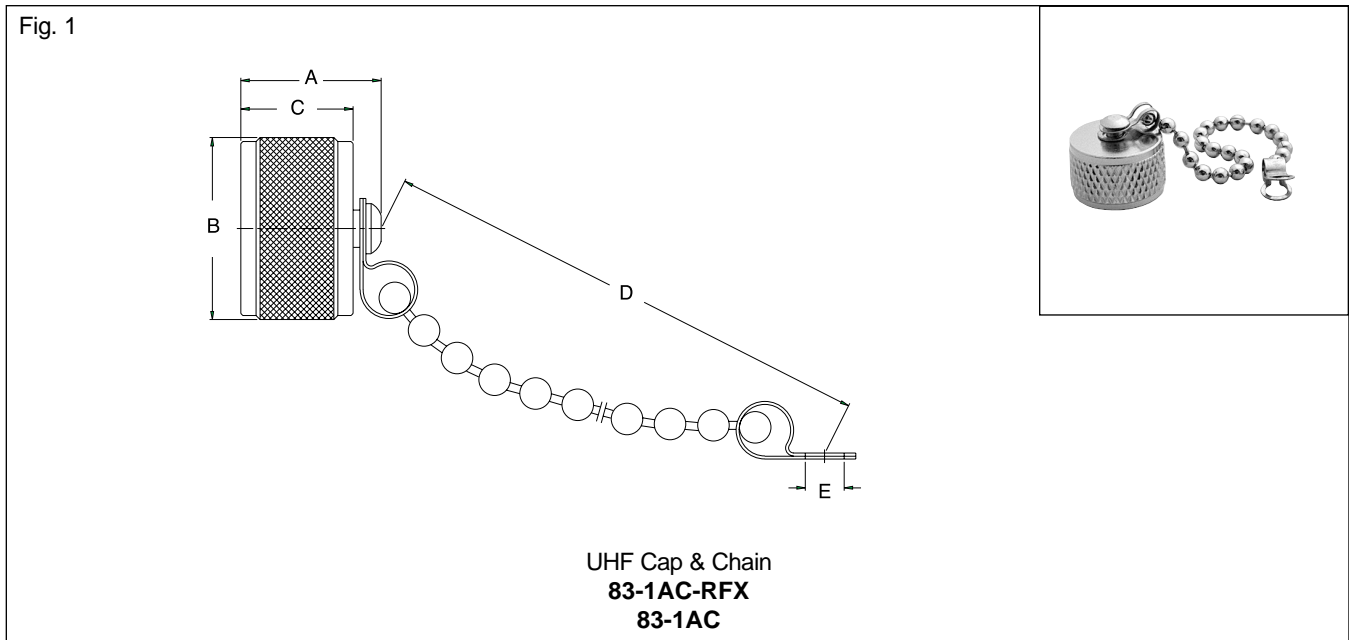
★ IBM 317228 ▼ max. panel when rear mounted thru panel ▲ Distributor stocked



UHF IN-SERIES ADAPTERS, HOODS

Description	Dimensions, inches (millimeters)				CAI	Plt.	Ins.	MTG Hole	Military Number	Amphenol Number	Fig.
	a	b	c •	d							
Straight Adapter/Jack-Jack	1.12(28.6)	.625(15.9)	—	—	—	P1	D1	—	PL-258	11850	1
Straight Adapter/Jack-Jack	1.12(28.6)	.625(15.9)	—	—	—	P1	D5	—	PL-258	83-1J	1 ▲
Bulkhead Adapter/Jack-Jack	2.00(50.8)	.625(15.9)	—	—	—	P1	D5	F	UG-363/U	83-1F	2 ▲
Angle Adapter/Jack-Plug	1.28(32.5)	.750(19.1)	—	1.19(30.2)	—	P1	D5	—	UG-646/U	83-1AP	3 ▲
Tee Adapter/Jack-Plug-Jack	1.63(41.3)	.750(19.1)	—	1.20(30.6)	—	P1	D5	—	M-358	83-1T	4 ▲
Hood/4-hole flange mount/Adapts Panel Receptacle 83-1R to RG-8,10,11,12,63,79,115,149,213,215	.750(19.1)	1.00(25.4)	.345(8.8)	—	C7	P3	—	—	UG-106/U	83-1H	5 ▲
Hood/4-hole flange mount/Adapts Panel Receptacle 83-1R to RG-58,141 cables	.750(19.1)	1.00(25.4)	.155(3.9)	—	C7	P3	—	—	UG-177/U	83-765	5 ▲
Straight Adapter/Plug-Plug	1.31(33.3)	.781(19.8)	—	—	—	P1	D5	—	PL-258	83-877	6

• accommodates cable diameter ▲ distributor stocked



UHF MALE CAP & CHAIN

Description	Dimensions, inches (millimeters)					CAI	PLT	Ins.	Amphenol Number	Fig.
	a	b	c •	d	e					
UHF Cap & Chain	.551 (14)	.717 (18.2)	.441 (11.2)	3.94 (10.0)	.154 (3.9)	—	P3	—	83-1AC-RFX	1
UHF Cap & Chain	.580 (14.7)	.750 (19.1)	.438 (11.1)	4.56 (115.9)	.130 (3.3)	—	P3	—	83-1AC	1