

K8205S-5003	2.92mm Jack Bulkhead Solder Clamp For Flexible RG402; 40GHz VSWR 1.2*	50Ω
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The diagram illustrates the K8205S-5003 connector from three perspectives:

- Front View (Top Left):** Shows a hexagonal base with concentric circles representing the contact area. Dimensions include an outer diameter of 8 [0.315] HEX, an inner diameter of 5.9 [0.232], and a central pin diameter of 0.6 [0.024].
- MOUNTING HOLE Detail (Bottom Left):** A circular detail showing a hole with a diameter of 6 [0.236] and a depth of 0.65 [0.0256].
- Side View (Right):** A detailed cross-section of the assembly. Key dimensions include:
 - Total length: 26.43 [1.041]
 - Distance from base to start of ferrule: 11.4 [0.449]
 - Ferrule length: 11.4 [0.449]
 - Hex nut height: 10.2 [0.402]
 - Thread specification: 1/4-36UNS-2A
 - MAX. gap: 3.1 [0.122]
 - Insulator ID: 3.8 [0.150]
 - Contact pin ID: 4.25 [0.167]
 - Overall body OD: 9.5 [0.374]

MOUNTING HOLE

Note:

- 1. Precision connector up to 40GHz
- 2. Solder clamp design ensures a sturdy connector/cable connection
- 3. Manufacturing low loss high frequency RF assemblies requires expertise.

*Using 5003

Parts	Material	Plating (Micro-inch)
Body	Stainless Steel	Passivated
Insulator	PPO	
Contact Pin	Beryllium Copper	Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20
Solder Ferrule	Brass	Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20
Clamp Nut	Stainless Steel	Passivated
Lock Washer	Stainless Steel	Passivated
Hex Nut	Stainless Steel	Passivated

Suitable Cables:
5003, SS402, T-Flex 402, Multiflex 141, .141SRF-W-P-50-F

This part number complies with RoHS.

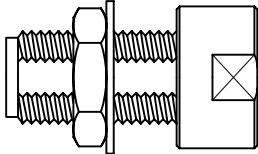
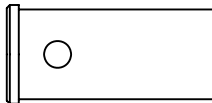
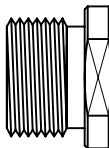
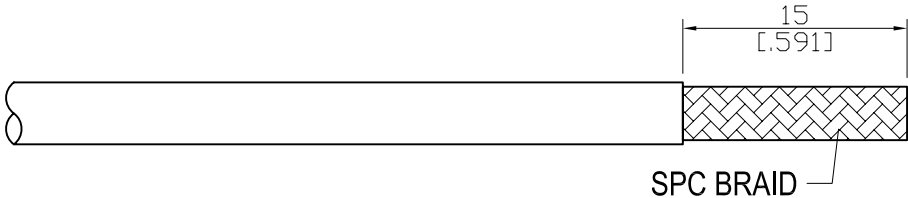
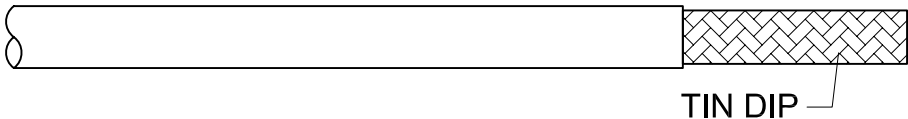
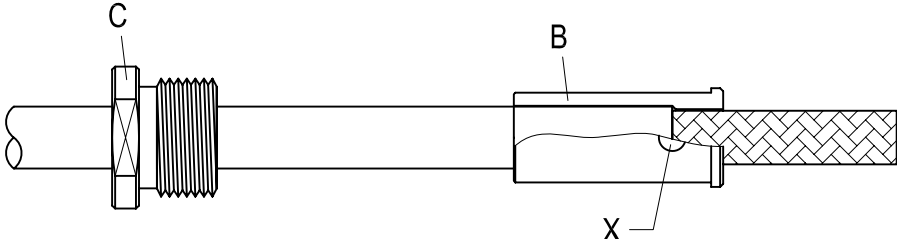
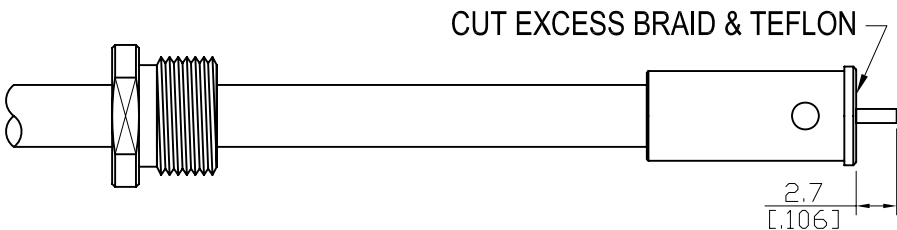
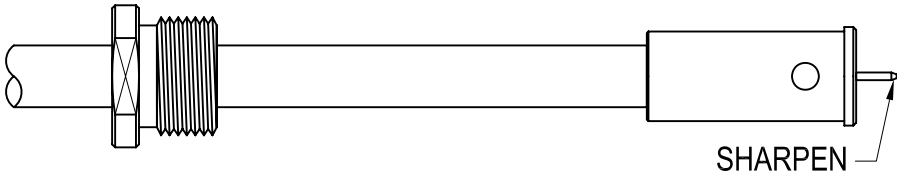
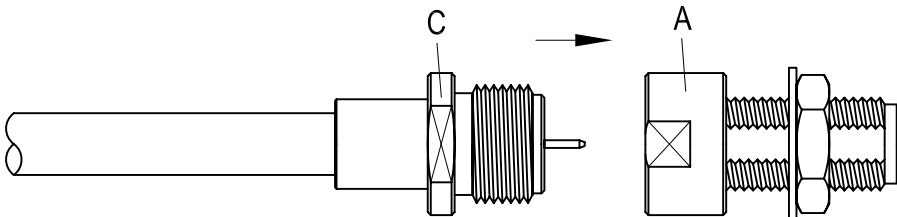
Notice: JYBAO reserves the right to make modifications deemed appropriate.

2.92 (K)	K8205S-5003
Interface MIL-STD-348B Mechanically compatible with 3.5 & SMA	
Electrical Data Impedance 50Ω Frequency range DC to 40GHz VSWR ≤ 1.2 (DC to 40GHz) Insertion loss $\leq 0.04 \times \sqrt{f(\text{GHz})}$ dB Insulation resistance $\geq 5000\text{M}\Omega$ Contact resistance inner conductor $\leq 3\text{m}\Omega$ Contact resistance outer conductor $\leq 2\text{m}\Omega$ Dielectric withstanding voltage (at sea level) 750 V rms Working Voltage (at sea level) 250 V rms RF leakage $\geq 100\text{dB}$ to 1GHz	
Mechanical Data Recommended coupling nut torque 11.47 inch lbs Coupling proof torque 15 inch lbs Contact Captivation-axial ≥ 4.9 lbs Durability (mating) ≥ 500	
Environmental Data Temperature range -55°C to +105°C Thermal shock MIL-STD-202, Method 107, Condition B Moisture resistance MIL-STD-202, Method 206 Corrosion MIL-STD-202, Method 101, Condition B RoHS Compliant	
Tooling	

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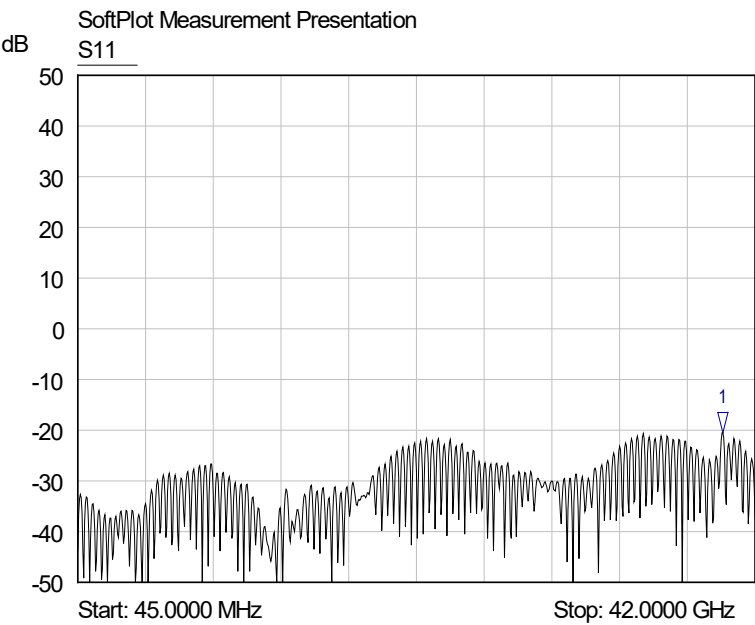
JYE BAO CO., LTD.

CABLE ASSEMBLY RECOMMENDATION

K8205S-5003		DATE	2020/05/07	REV	—
A B C    BODY + HEX NUT + LOCK WASHER SOLDER FERRULE CLAMP NUT					
DIAGRAM			ASSEMBLY INSTRUCTION		
			Step 1: STRIP AS SHOWN.		
			Step 2: TIN DIP SPC BRAID.		
			Step 3: SLIDE NUT " C " AND SOLDER FERRULE " B " OVER THE CABLE. Step 4: SOLDER IN " X ".		
			Step 5: CUT AWAY ANY EXCESS BRAID AND TEFLON STICKING OUT OF THE SOLDER FERRULE. Step 6: CUT CENTER CONDUCTOR TO LENGTH.		
			Step 7: SHARPEN CENTER CONDUCTOR TIP.		
			Step 8: FINALLY SCREW NUT " C " ON THE CONNECTOR BODY " A ".		
This part number complies with RoHS. Notice: JYEBAO reserves the right to make modifications deemed appropriate.					
APPROVED		CHECKED		DRAWING	
				Albert	

K8205S-5003

S11



1 S11
40.0071 GHz
-20.43 dB