

## *Environmental D-Sub Connector - JSC11W1 Series*



Web link to Sunbank  
[www.sunbankcorp.com](http://www.sunbankcorp.com)

**Description**

This Mil DTL 24308 D-Sub derivative will meet the demand for harsh environment connections in any Industrial, Mil/Aero and Commercial application. Sunbank also manufactures a complete line of backshell accessories to further enhance the EMI/RFI and environmental performance of this connector. This allows the OEM to develop installations with accessories specifically designed to maximize the performance characteristics of the cable assembly or harness using the Sunbank JSC11W1-series connectors. The result: the most reliable interconnect system available.



**Applications**

Sunbank developed the JSC11W1 connector in response to a VOC (voice of customer) request for a high reliability, moisture-proof connector for use in the In-Flight Entertainment (IFE) Industry. The JSC11W1 was designed and passed qualification testing without deviation under harsh Water Proof (Category W), Dielectric Withstanding Voltage and Insulation Resistance testing at 1000 Volts AC under constant water stream. The JSC11W1 is unique in that it includes a monolithic insert design. Other connectors use split-insert designs, which could lead to moisture ingress issues. The monolithic design of the JSC11W1 insert eliminates the potential for moisture ingress. It is the only connector of its kind in the industry. Our proprietary design provides for enhanced reliability through dynamic environments including shock, vibration, altitude immersion, and more. The design features of this Sunbank product provide the OEM with that extra level of integrity not found with standard MIL-SPEC D-subminiature connectors, hybrids and the like. Sunbank designed these products with two primary goals in mind: Safety and Reliability.

**Performance Specifications:**

- Moisture Proof per RTCA/DO-160 Category W
- Temperature Rating -65OF to +250OF  
-55OC to +120OC
- Dielectric Withstanding Voltage 1250 VAC sea level
- Wire/Contact Size #20 AWG or #18 AWG
- Current Rating 7.5 Amps

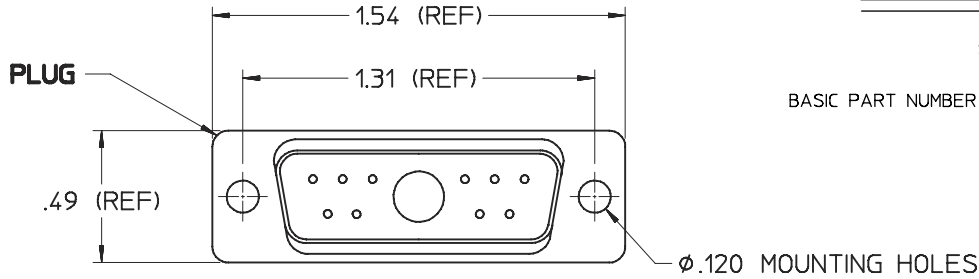
**Material / Finish:**

- Shell Steel per ASTM A568 / Yellow Chromate over Zinc  
per ASTM B633
- Insert Glass Filled Polyester, Green / N/A
- Interfacial Seal Flourosilicone / N/A
- Sealing Cap Flourosilicone / N/A
- Contacts Copper Alloy (body) / .000030 min. Gold per Mil-G-45204 over  
.000100 min. Nickel per QQ-N-290

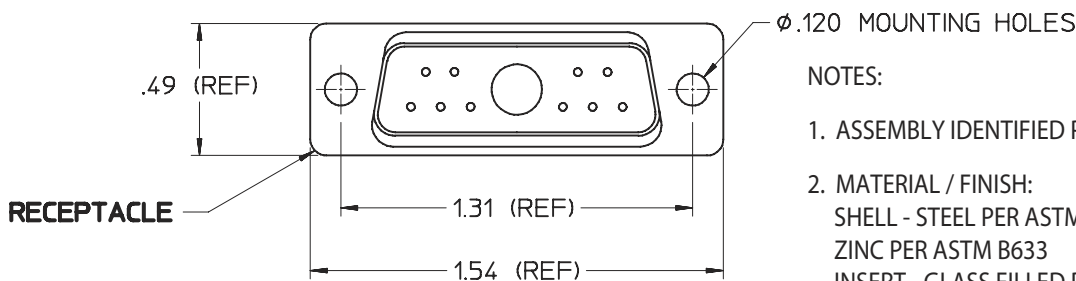
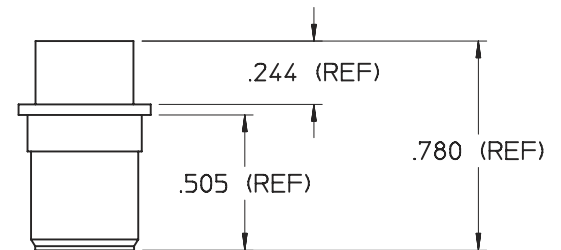
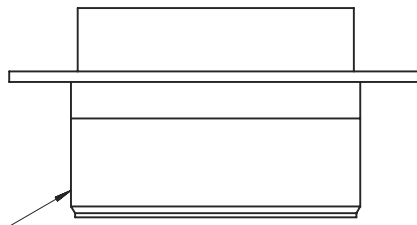
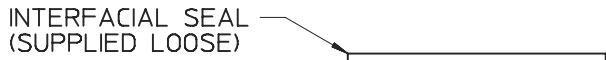
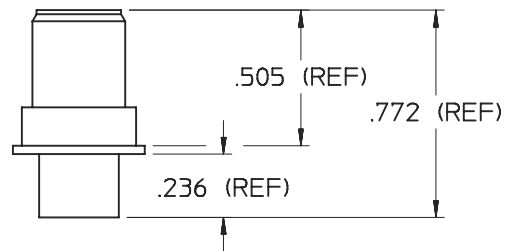
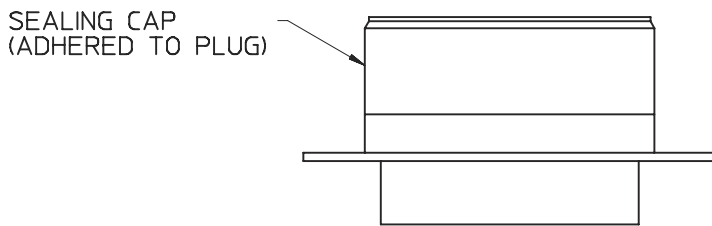
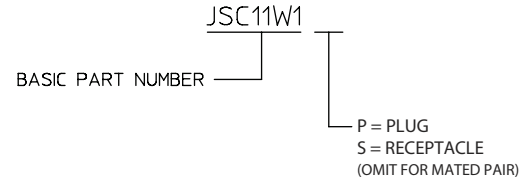
# D-Sub Connector

Environmental, Plug, Receptacle, Mated Pair

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### EXAMPLE PART NUMBER



### NOTES:

1. ASSEMBLY IDENTIFIED PER MIL-STD-130.
2. MATERIAL / FINISH:  
 SHELL - STEEL PER ASTM A568 / YELLOW CHROMATE OVER ZINC PER ASTM B633  
 INSERT - GLASS FILLED POLYESTER, GREEN / N/A  
 INTERFACIAL SEAL - SILICONE / N/A (PLUG ONLY)  
 SEALING CAP - SILICONE / N/A
3. CONNECTOR MEETS DIMENSIONAL MOUNTING ENVELOPE OF MIL-C-24308/4, SHELL SIZE 2.
4. SEALING CAPS ADHERED TO METAL SHELLS



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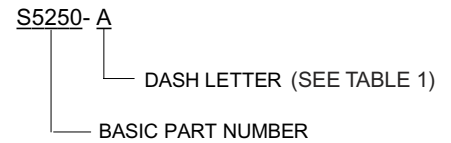
### INSERTION INSTRUCTIONS FOR S5250-A, B, C, D, K, L

1. STRIP WIRE/CABLE TO LENGTH (SIZE 20 CONTACT, VIEW A), (SIZE 8, VIEW B)
2. INSERT CONTACT AND WIRE INTO CRIMP TOOL AND LOCATOR.
3. CENTER WIRED CONTACT INTO GROOVE OF INSERTION TOOL WITH TOOL TIP BUTTING CONTACT SHOULDER. INSERT CONTACT INTO CONNECTOR CAVITY UNTIL A POSITIVE STOP IS FELT.
4. PULL LIGHTLY ON WIRE TO MAKE SURE CONTACT HAS POSITIVELY LOCKED INTO THE INSERT (4 POUNDS MAX)

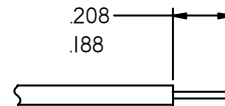
### REMOVAL INSTRUCTIONS FOR S5250-A, B, C, D, K, L

1. INSERT THE REMOVAL TOOL OVER THE PIN CONTACT WITH THE PLUNGER IN THE OUT POSITION.
2. MAKE SURE THE REMOVAL TUBE IS COMPLETELY SEATED ON THE INSERT.
3. WHILE KEEPING THE PLUNGER TUBE AGAINST THE INSERT, PUSH THE PLUNGER DOWN ON THE CONTACT UNTIL RELEASE.

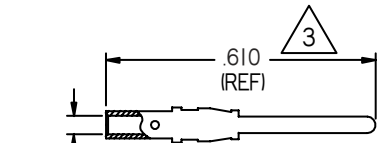
### EXAMPLE PART NUMBER



**VIEW A**

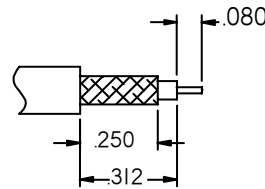


WIRE TRIMMING DIMENSIONS  
(18 & 20 GA)

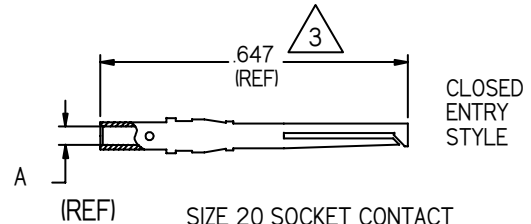


SIZE 20 PIN CONTACT

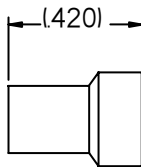
**VIEW B**



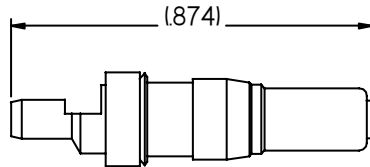
COAX CABLE TRIM DIMENSIONS



SIZE 20 SOCKET CONTACT



SIZE 8 COAX PLUG



SIZE 8 COAX RECEPTACLE

**TABLE I**

PART NUMBER	DESCRIPTION	TOOLS			BARREL SIZE / A DIM
		CRIMP	INSERTION	REMOVAL	
S5250-A	SIZE 20 CONTACT / PIN RATED 7.5 AMP CONT INUOUS	S5250-F <sup>5</sup>	S5250-E <sup>4</sup>	S5250-G	18 / .056
S5250-B	SIZE 20 CONTACT / PIN RATED 7.5 AMP CONT INUOUS	S5250-F <sup>5</sup>	S5250-E <sup>4</sup>	S5250-G	20 / .045
S5250-C	SIZE 20 CONTACT / SOCKET RATED 7.5 AMP CONT INUOUS	S5250-F <sup>5</sup>	S5250-E <sup>4</sup>	S5250-G	18 / .056
S5250-D	SIZE 20 CONTACT / SOCKET RATED 7.5 AMP CONT INUOUS	S5250-F <sup>5</sup>	S5250-E <sup>4</sup>	S5250-G	20 / .045
S5250-K	SIZE 8, 500 OHM PLUG	S5250-N <sup>6</sup> <sup>5</sup>	S5250-R	S5250-P	N/A
S5250-L	SIZE 8, 500 OHM RECEPTACLE	S5250-M <sup>5</sup>	S5250-R	S5250-P	N/A
S5250-S1	SIZE 20 CONTACT SEALING PLUG	N/A	S5250-H	N/A	N/A
S5250-S2	SIZE 8 CONTACT SEALING PLUG	N/A	N/A	N/A	N/A

Notes:

<sup>6</sup>M22520/5-01, -03 (REF)

<sup>5</sup>M22520/2-01, M2252012-08( REF)

<sup>4</sup>M81969/1-02(REF)

<sup>3</sup>DIMENSION TYP FOR ALL BARREL SIZES.

2. MATERIAL / FINISH:

CONTACTS ~ COPPER ALLOY (BODY) / .000030 MIN. GOLD PER MIL-G-45204 OVER .000100 MIN. NICKEL PER QQ-N-290

SEALING PLUGS ~ DELRIN (BLACK) / N/A

TOOLS ~ CRES (METAL COMPONENTS) / PASSIVATED

1. IDENTIFIED PER MIL-STD-130