

INTERFACE DESIGN STANDARD		<i>The PHOENIX Company of Chicago, Inc.</i> 22 GREAT HILL RD., NAUGATUCK, CT 06770 WWW.PHOENIXOFCHICAGO.COM PHONE: (800) 323-9562	REV.	DESCRIPTION	DATE	APPR.
IDS-09J			D	PER ECN 13033	07/23/18	JEM
SHEET 1 OF 2	DATE: 11/14/07		B	PER ECN 13001	06/21/18	JEM
DRAWN: EK	APPROVED: JEM		C	PER ECN 12823	04/02/18	JEM

WARNING - THIS DOCUMENT CONTAINS TECHNICAL DATA WHOSE EXPORT IS RESTRICTED BY THE ARMS EXPORT CONTROL ACT (TITLE 22, U.S.C., SEC 2751, ET. SEQ.) OR THE EXPORT ADMINISTRATION ACT OF 1979, AS AMENDED, TITLE 50, U.S.C., APP 2401 ET SEQ. VIOLATIONS OF THESE EXPORT LAWS ARE SUBJECT TO SEVERE CRIMINAL PENALTIES. DISSEMINATE IN ACCORDANCE WITH PROVISIONS OF DOD DIRECTIVE 5230.25.

Description: 09J Series, SMB, Non-Magnetic Straight Connector

MATERIALS

BODIES

Plug: Non-Magnetic Brass
 Receptacle: Non-Magnetic Brass

CONTACTS

Male Contact: Non-Magnetic Brass Or *
 Female Contacts: Beryllium Copper Per ASTM-B-196

INSULATORS

Teflon (PTFE) Per ASTM-D-1710 Residual Magnetism <1.0000 mu

PLATING

Gold Per MIL-DTL-45204 * Beryllium Copper Per ASTM-B-196
 Copper Per MIL-C-14550

FINISH (Add Letter To End Of Part Number)

MATING CHARACTERISTICS

OPTIONS

Bodies- .000020 Min. Gold Over Copper

Contacts- .000030 Min. Gold Over Copper

Other Metal Parts: Gold Plated To Meet The Environmental Requirements

Center Contact Pin And Socket Per MIL-PRF-39012
 Engagement / Disengagement Force: Insertion 40 oz. (2.5 LBS.) Max. Withdrawal 1 oz. (0.063 lbs.) Min. Per MIL-PRF-39012.
 Engagement Initial 224 oz. (14 lbs.) Max., After 500 Cycles, 32 oz. (2 lbs.) Min.

ELECTRICAL

Frequency Range: DC To 4 GHz	Contact Resistance: 6.0 Milliohms
Voltage Rating Straight: 335 Volts RMS	VSWR: RG-178 Or Equivalent $1.30 + .04*f(\text{GHz})$. RG-316 Or Equivalent $1.25 + .04*f(\text{GHz})$.
Voltage Rating Angled:	RF : High Potential: Solder Pot, 600 Volts RMS. RG-178 Or Equivalent 500 Volts RMS. RG-316 Or Equivalent 700 Volts RMS.
Insulation Resistance: 1000 Megohms Min	Corona Level: 70,000 FT. - 185 Volts (RG-178). 250 Volts (RG-316).
Insertion Loss: 0.3dB Max. 1.5 GHz.	RF Leakage: -55 dB MIN. @ 2-3 GHz
Current Rating:	
Impedance: 50 Ohms	

ENVIRONMENTAL

Operating Temperature: -65°C To+ 165°C	Durability: 500 Cycles
Insulation Resistance: N/A	Moisture Resistance: N/A
Vibration: MIL-STD-202, Method 204, Test Condition D	Corrosion: MIL-STD-202, Method 101, Test Condition B
Shock: MIL-STD-202, Method 213, Test Condition A	Temperature Cycling: N/A
Thermal Shock: MIL-STD-202, Method 107, Test Condition B	High Temperature Test: N/A
	Salt Spray: N/A

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IDS-09J			D	PER ECN 13033	07/23/18	JEM
SHEET 2 OF 2	DATE: 11/14/07		B	PER ECN 13001	06/21/18	JEM
DRAWN: EK	APPROVED: JEM		C	PER ECN 12823	04/02/18	JEM

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Description: 09J Series, SMB, Non-Magnetic Right Angle Connector

MATERIALS

BODIES

Plug: Non-Magnetic Brass
 Receptacle: Non-Magnetic Brass

CONTACTS

Male Contact: Non-Magnetic Brass Or *
 Female Contacts: Beryllium Copper Per ASTM-B-196

INSULATORS

Teflon (PTFE) Per ASTM-D-1710 Residual Magnetism <1.0000 mu

PLATING

Gold Per MIL-DTL-45204 * Beryllium Copper Per ASTM-B-196
 Copper Per MIL-C-14550

FINISH (Add Letter To End Of Part Number)

MATING CHARACTERISTICS

OPTIONS

Bodies- .000020 Min. Gold Over Copper

Contacts- .000030 Min. Gold Over Copper

Other Metal Parts: Gold Plated To Meet The Environmental Requirements

Center Contact Pin And Socket Per MIL-PRF-39012
 Engagement / Disengagement Force: Insertion 40 oz. (2.5 LBS.) Max. Withdrawal 1 oz. (0.063 lbs.) Min. Per MIL-PRF-39012.
 Engagement Initial 224 oz. (14 lbs.) Max., After 500 Cycles, 32 oz. (2 lbs.) Min.

ELECTRICAL

Frequency Range: DC To 4 GHz	Contact Resistance: 12.0 Milliohms
Voltage Rating Straight: 335 Volts RMS	VSWR: RG-178 Or Equivalent $1.45 + .04*f(\text{GHz})$. RG-316 Or Equivalent $1.35 + .04*f(\text{GHz})$.
Voltage Rating Angled:	RF : High Potential:
Insulation Resistance: 1000 Megohms Min	Corona Level: 70,000 FT. - 185 Volts (RG-178). 250 Volts (RG-316).
Insertion Loss: 0.6 dB Max. 1.5 GHz.	RF Leakage: -55 dB MIN. @ 2-3 GHz
Current Rating:	
Impedance: 50 Ohms	

ENVIRONMENTAL

Operating Temperature: -65°C To+ 165°C	Durability: 500 Cycles
Insulation Resistance: N/A	Moisture Resistance: N/A
Vibration: MIL-STD-202, Method 204, Test Condition D	Corrosion: MIL-STD-202, Method 101, Test Condition B
Shock: MIL-STD-202, Method 213, Test Condition A	Temperature Cycling: N/A
Thermal Shock: MIL-STD-202, Method 107, Test Condition B	High Temperature Test: N/A
	Salt Spray: N/A