INTERFACE DESIGN STANDARD	
IDS-178	
SHEET 1 OF 1	DATE: 03/19/15
DRAWN: JEM	APPROVED: JEM

The ***PHOENIX*** *Company of Chicago, Inc.*
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REV.	DESCRIPTION	DATE	APPR.
D	PER ECN 13292	04/23/19	JEM
C	PER ECN 13033	07/18/18	JEM
B	PER ECN 12816	03/27/18	JEM
A	PER ECN 12125	03/19/15	JEM

178 Series, PkZ® Size 12

MATERIALS

BODIES

Plug:	Brass Per ASTM-B-16
Receptacle:	Brass Per ASTM-B-16

CONTACTS

Male Contact:	Beryllium Copper Per ASTM-B-196
Female Contacts:	Beryllium Copper Per ASTM-B-196

INSULATORS

Teflon (PTFE) Per ASTM-D-1457

PLATING

Gold PerR MIL-DTL-45204
Copper Per MIL-C-14550
Nickel Per QQ-N-290

FINISH (Add Letter To End Of Part Number)

OPTIONS

Bodies And Contacts:

A: .000050 Min. Gold Over Nickel

Other Metal Parts: Plated To Meet The Environmental Requirements

MATING CHARACTERISTICS

Outer Bodies:	24 oz. (1.5 lbs.) Max. Insertion. 2 oz. (0.125 lbs.) Min. Withdrawal
Center Contacts:	14 oz. (0.875 lbs.) Max. Insertion. .5 oz. (0.032 lbs.) Min. Withdrawal
Axial Mating Tol.:	.070" (1.78 mm)
Housing Retention:	192 oz. (12 lbs.) Min.

ELECTRICAL

Frequency Range:	DC To 40 GHz	Contact Resistance:	Center Contact 6 Milliohms
Voltage Rating Straight:	800 VRMS	Contact Resistance:	Outer Contact 4 Milliohms
Voltage Rating Angled:	600 VRMS	VSWR:	Configuration Dependent
Insulation Resistance:	2000 Megohms Min.		
Insertion Loss:	$.06\sqrt{f(GHz)}$ dB		RG-316, RG-178, RG-405 Or Equivalent
Current Rating:	1.5 AMPS		
Impedance:	50 Ohms	R.F. Leakage:	-90 dB Min. @2-3 GHz

ENVIRONMENTAL

Operating Temperature:	-55°C to+ 165°C	Durability:	500 Cycles
Insulation Resistance:	2000 Megohms Post Humidity	Moisture Resistance:	MIL-STD-202, Method 106
Vibration:	MIL-STD-202, Method 204, Test Condition D	Corrosion:	N/A
Shock:	MIL-STD-202, Method 213, Test Condition I	Temperature Cycling:	N/A
Thermal Shock:	MIL-STD-202, Method 107, Test Condition B, Except High Temperature Shall Be +85°C	High Temperature Test:	N/A
		Salt Spray:	MIL-STD-1344, Method 1001, Condition B