

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-168			G	PER ECN 13787	06/18/20	JEM
SHEET 1 OF 1	DATE: 08/12/15		F	PER ECN 13509	04/07/20	JEM
DRAWN: JEM	APPROVED: RMB		E	PER ECN 13488	09/10/19	JEM

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Description: 168 Series, PkZ ®, Size 12

### MATERIALS

#### BODIES

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

#### CONTACTS

Male Contact: Brass Per ASTM-B-16 Or \*  
 Female Contacts: Beryllium Copper Per ASTM-B-196

#### INSULATORS

Teflon (PTFE) Per ASTM-D-1457

#### PLATING

Gold Per MIL-DTL-45204 \* Beryllium Copper Per ASTM-B-196  
 Copper Per MIL-C-14450  
 Nickel Per QQ-N-290

### FINISH (Add Letter To End Of Part Number)

#### OPTIONS

"A" = .000050 Min. Gold Over Nickel

"C" = .000050 Min. Copper Over Nickel

Other Metal Parts: Plated To Meet The Environmental Requirements

### MATING CHARACTERISTICS

Bodies: 24 oz (1.5 lbs) Max. Insertion  
 2 oz (.125 lbs) Min. Withdrawal

Contacts: 14 oz (.875 lbs) Max. Insertion  
 .5 oz (.031 lbs) Min. Withdrawal

Axial Mating Tolerance: .110" [2.79]

Housing Retention: 192 oz (12 lbs) Min.

### ELECTRICAL

Frequency Range: DC To 40 GHz

Voltage Rating Straight: 800 VRMS

Voltage Rating Angled: 600 VRMS

Insulation Resistance: 2000 Megohms Min.

Insertion Loss:  $.06\sqrt{f(\text{GHz})}$  dB

Current Rating: N/A

Impedance: 50 Ohms

Contact Resistance: Center Contact 6 Milliohms

Contact Resistance: Outer Contact 4 Milliohms

VSWR:  
 Configuration  
 Dependant

R.F. Leakage: -90 dB Min. @ 2-3 GHz

### ENVIRONMENTAL

Operating Temperature: -55° To +165° C

Durability: 500 Cycles

Insulation Resistance: 2000 Megohms Post Humidity

Moisture Resistance: N/A

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