

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-56AJ			I	PER ECN 13787	06/17/20	JEM
SHEET 1 OF 1	DATE: 11/14/07		H	PER ECN 13382	07/01/19	JEM
DRAWN: CA	APPROVED: JEM					

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Description: 56 Series, PkZ ®, Size 12 Non-Magnetic

### MATERIALS

#### BODIES

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

#### Clip Ring

Beryllium Copper Per ASTM-B-196

#### CONTACTS

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

#### INSULATORS

Virgin Teflon (PTFE) Per ASTM-D-1710 Or #1 Varyflex Type HV,  
 Two-Part Epoxy

Residual Magnetism < 1.0000mu

#### PLATING

Gold Per MIL-DTL-45204  
 Copper Per MIL-C-14550

\* Non-Magnetic Brass

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

### MATING CHARACTERISTICS

#### OPTIONS

Bodies- .000050 Min. Gold Over Copper  
 Contacts- .000050 Min. Gold Over Copper

Bodies: 32 oz. (2 lbs.) Max. Insertion.  
 2 oz. (0.125 lbs.) Min. Withdrawal  
 Contacts: 14 oz. (0.875 lbs.) Max. Insertion.  
 .5 oz. (0.032 lbs.) Min. Withdrawal

Other Metal Parts: Plated To Meet The Environmental Requirements

Housing Retention: 192 Oz. (12 Lbs.) Min.

### ELECTRICAL

Frequency Range: DC To 42 GHz  
 Voltage Rating Straight: 800 VRMS  
 Voltage Rating Angled: 600 VRMS  
 Insulation Resistance: 2000 Megohms Min.  
 Insertion Loss:  $.06\sqrt{f(\text{QHz})}$  dB  
 Current Rating: N/A  
 Impedance: 50 Ohms

Contact Resistance: Center Contact 6 Milliohms  
 Contact Resistance: Outer Contact 4 Milliohms  
 VSWR: Configuration Dependent  
 R.F. Leakage: -90 dB Min. @ 2-3 GHz

### ENVIRONMENTAL

Operating Temperature: -65°C to +165°C  
 Insulation Resistance: 2000 Megohms Post Humidity  
 Vibration: MIL-STD-202, Method 204, Test Condition D  
 Shock: MIL-STD-202, Method 213, Test Condition I  
 Thermal Shock: MIL-STD-202, Method 107, Test Condition B, Except High Temperature Shall Be +85° C

Durability: 500 Cycles  
 Moisture Resistance: MIL-STD-202, Method 106  
 Corrosion: N/A  
 Temperature Cycling: N/A  
 High Temperature Test: N/A  
 Salt Spray: MIL-STD-1344, Method 1001, Condition B