| INTERFACE DESIGN STANDARD | |
|---|---|
| IDS-78 | |
| SHEET 1 OF 1 | DATE: 06/16/98 |
| DRAWN: JEM | APPROVED: HN |

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| REV. | DESCRIPTION | DATE | APPR. |
|---|---|---|---|
| H | PER ECN 13488 | 09/10/19 | JEM |
| G | PER ECN 13033 | 07/24/18 | JEM |
| F | PER ECN 12819 | 03/28/18 | JEM |
| E | PER ECN 11479 | 10/19/12 | JEM |



# Description: 78 Series, Size 8 PkZ®

## MATERIALS

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

### CONTACTS
Male Contact: Beryllium Copper Per ASTM-B-197
Female Contacts: Beryllium Copper Per ASTM-B-197

### INSULATORS
Teflon (PTFE) Per ASTM-D-1457

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

### CLIP RING
Beryllium Copper Per ASTM-B-196

### O-RING (Opt.)
Grounding Ring: Beryllium Copper Per ASTM-B-196

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

### OPTIONS
"A" = .000050" Min. Gold Over Nickel
"B" = .000030" Min. Gold Over Nickel
"C" = .000050" Min. Gold Over Copper
"D" = .000030" Min. Gold Over Copper

## MATING CHARACTERISTICS

| | |
|---|---|
| Bodies: | 48 oz. (3lbs Max.) Insertion.<br>2oz. (0.125lbs.) Min. Withdrawal |
| Contacts: | 32 oz. (2lbs.) Max. Insertion.<br>.5oz. (0.032 Lbs.) Min. Withdrawal |
| Axial Mating Tol.: | .090" |
| Housing Retention: | 192 oz. (12 lbs.) Min. |

## ELECTRICAL

| | |
|---|---|
| Frequency Range: | DC To 32 GHz |
| Voltage Rating Straight: | 1000 VRMS |
| Voltage Rating Angled: | 800 VRMS |
| Insulation Resistance: | 2000 Megohms Min. |
| Insertion Loss: | $.06\sqrt{f(GHz)}$ dB |
| Current Rating: | 5 AMPS |
| Impedance: | 50 Ohms |
| Contact Resistance: | Center Contact 5 Milliohms |
| Contact Resistance: | Outer Contact 3 Milliohms |
| VSWR: | |
| RG-402 | 1.08 + .009*f(GHz.) |
| RG-174, 316 | 1.15 + .020*f(GHz.) |
| RG-142, 223, 303, 400 | 1.15 + .010*f(GHz.) |

## ENVIRONMENTAL

| | |
|---|---|
| Operating Temperature: | -55°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 |