

“Better than QPL” MIL-DTL-38999  
High-Speed Solution



## SuperNine® high-speed connectors with special inserts to accommodate El Ochito® octaxial contacts

- **Tooled and ready-to-ship high-speed and hybrid insert arrangement connectors for size #8 El Ochito shielded contacts. Arrangements for #8, #12, and #16 Coax, Twinax, and Quadrax also available**
- **Supported applications: 10/100/1G/10G BASE-T Ethernet, HDMI, DisplayPort, SATA, USB 3.0 , 1553 databus and general RF or differential data transmission**

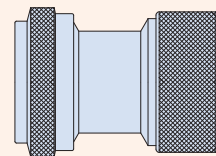
## El Ochito®



### EL OCHITO CONTACT REFERENCE GUIDE

|              |               |                |              |             |
|--------------|---------------|----------------|--------------|-------------|
|              |               |                |              |             |
| Contact Type | White, Type I | White, Type II | Blue, Type I | Red, Type I |
| Pin          | 858-003       | 858-005        | 858-028      | 858-030-01  |
| Socket       | 858-004       | 858-006        | 858-029      | 858-031     |

### RECOMMENDED BACKSHELL



**377HS121**

Series 37 Aluminum Backshell for SuperNine plug and receptacle connectors. Straight, 45°, and 90° configurations available.

“BETTER THAN QPL”

# High-Speed SuperNine® MIL-DTL-38999



with El Ochito® octaxial contacts

| How To Order SuperNine® High-Speed Connectors with El Ochito contacts |   |  |  |  |  |  |  |  |  |  |
|---|---|--|--|--|--|--|--|--|--|--|
| <b>Sample Part Number</b>   | <b>233-217</b>  |  |  |  |  |  |  |  |  |  |
| <b>Series / Basic Part No.</b>  | 233-217 with Accessory Thread 233-224 Integral Banding Porch  |  |  |  |  |  |  |  |  |  |
| <b>Connector Style</b>  | G6 Plug, EMI spring 05 in-line receptacle 07 jam-nut recpt.<br>00 wall mt. recpt., slotted holes CM wall mt. recpt., metric clinch nuts<br>CS wall mt. recpt., std. clinch nuts DO wall mt. recpt., thru holes<br>HM wall mt. recpt., metric helicoils HS wall mt. recpt., std. helicoils |  |  |  |  |  |  |  |  |  |
| <b>Material/Finish</b>  | NF = Cad/O.D. ME = Electroless Nickel MT = Nickel PTFE ZR = Black Zinc Nickel   |  |  |  |  |  |  |  |  |  |
| <b>Shell Size</b>   | 9, 11, 13, 17, 19, 21, 23, 25   |  |  |  |  |  |  |  |  |  |
| <b>Ground Option</b>  | G = Common Ground - = None  |  |  |  |  |  |  |  |  |  |
| <b>Insert Arrangement</b>   | See insert arrangement tables, next pages   |  |  |  |  |  |  |  |  |  |
| <b>Insert Designator</b>  | A = Pin insert, less contacts B = Socket insert, less contacts  |  |  |  |  |  |  |  |  |  |
| <b>Alternate Polarization*</b>  | A, B, C, D, E, N = Normal (IAW MIL-DTL-38999 Series III)  |  |  |  |  |  |  |  |  |  |
| <b>Optional Mod Code</b>  | 909XX = Supplies connector with contacts  |  |  |  |  |  |  |  |  |  |

| How To Order SuperNine® High-Speed Quick-Disconnect Connectors with El Ochito contacts |   |  |  |  |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|--|--|--|
| <b>Sample Part Number</b>  | <b>233-260</b>  |  |  |  |  |  |  |  |  |  |
| <b>Series / Basic Part No.</b>   | 233-260 High-Speed Quick Disconnect   |  |  |  |  |  |  |  |  |  |
| <b>Connector Style</b>   | G6 = Quick Disconnect Plug  |  |  |  |  |  |  |  |  |  |
| <b>Material/Finish</b>   | NF = Cad/O.D. ME = Electroless Nickel MT = Nickel PTFE<br>ZR = Black Zinc Nickel Z1 = SST, Passivated |  |  |  |  |  |  |  |  |  |
| <b>Shell Size</b>  | 9, 11, 17, 19, 21, 23, 25   |  |  |  |  |  |  |  |  |  |
| <b>Ground Option</b>   | G = Common Ground - = None; See Note 8  |  |  |  |  |  |  |  |  |  |
| <b>Insert Arrangement</b>  | See insert arrangement tables, next pages   |  |  |  |  |  |  |  |  |  |
| <b>Lanyard Length Code</b>   | consult factory or SuperNine catalog  |  |  |  |  |  |  |  |  |  |
| <b>Contact Style</b>   | A = Pin Less Contact B = Socket Less Contact  |  |  |  |  |  |  |  |  |  |
| <b>Alternate Polarization*</b>   | A, B, C, D, E, N = Normal (IAW MIL-DTL-38999 Series III)  |  |  |  |  |  |  |  |  |  |
| <b>Optional Mod Code</b>   | 909ES = Connector with El Ochito Socket contacts 909EP Connector with El Ochito Pin contacts          |  |  |  |  |  |  |  |  |  |

| How To Order SuperNine® High-Speed PC-Tail Threaded Standoff Receptacles with El Ochito contacts |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|
| <b>Sample Part Number</b>  | <b>233-218</b>   |  |  |  |  |  |  |  |  |  |
| <b>Series / Basic Part No.</b>   | High-Speed PC tail wall mount receptacles, threaded standoffs  |  |  |  |  |  |  |  |  |  |
| <b>Connector Style</b>   | 07 jam-nut 00 wall-mount, slotted holes CM wall mt., metric clinch nuts<br>CS wall mt., std. clinch nuts HM wall mt., metric helicoils HS wall mt., std. helicoils |  |  |  |  |  |  |  |  |  |
| <b>Material/Finish</b>   | NF = Cad/O.D. ME = Electroless Nickel MT = Nickel PTFE ZR = Black Zinc Nickel  |  |  |  |  |  |  |  |  |  |
| <b>Shell Size</b>  | 9, 11, 13, 15, 17, 19, 21, 23, 25  |  |  |  |  |  |  |  |  |  |
| <b>Contact Type</b>  | E = El Ochito <sup>7</sup>   |  |  |  |  |  |  |  |  |  |
| <b>Ground Option</b>   | G = Common Ground - = None   |  |  |  |  |  |  |  |  |  |
| <b>Insert Arrangement</b>  | See insert arrangement tables, next pages  |  |  |  |  |  |  |  |  |  |
| <b>Contact Style</b>   | P = Pin, PC Tail S = Socket, PC Tail   |  |  |  |  |  |  |  |  |  |
| <b>Alternate Polarization*</b>   | A, B, C, D, E, N = Normal (IAW MIL-DTL-38999 Series III)   |  |  |  |  |  |  |  |  |  |

| How To Order SuperNine® High-Speed Wall Mount Receptacles with El Ochito contacts |   |  |  |  |  |  |  |  |  |  |
|---|---|--|--|--|--|--|--|--|--|--|
| <b>Sample Part Number</b>   | <b>233-225</b>  |  |  |  |  |  |  |  |  |  |
| <b>Series / Basic Part</b>  | SuperNine® High-Speed, dual flange wall-mount receptacle  |  |  |  |  |  |  |  |  |  |
| <b>Connector Style*</b>   | 07 jam-nut 00 wall-mount, slotted holes/stand off, std. threads<br>10 Wall-mount, slotted holes/stand off, metric threads<br>CM wall-mount, metric clinch nuts CS wall mount, std. clinch nuts<br>HM wall mount, metric helicoils HS wall mount, std. helicoils |  |  |  |  |  |  |  |  |  |
| <b>Material/Finish</b>  | NF = Cad/O.D. ME = Electroless Nickel MT = Nickel PTFE ZR = Black Zinc Nickel   |  |  |  |  |  |  |  |  |  |
| <b>Shell Size</b>   | 9, 11, 13, 17, 19, 21, 23, 25   |  |  |  |  |  |  |  |  |  |
| <b>Contact Type</b>   | E = El Ochito   |  |  |  |  |  |  |  |  |  |
| <b>Ground Option</b>  | G = Common Ground - = None  |  |  |  |  |  |  |  |  |  |
| <b>Insert Arrangement</b>   | Per MIL-STD-1560, see page C-5 and C-6  |  |  |  |  |  |  |  |  |  |
| <b>Contact Style</b>  | P = Pin, PC Tail S = Socket, PC Tail  |  |  |  |  |  |  |  |  |  |
| <b>Alternate Polarization*</b>  | A, B, C, D, E, N = Normal (IAW MIL-DTL-38999 Series III)  |  |  |  |  |  |  |  |  |  |

# SuperNine® High-speed connectors

## High-speed size #8 and hybrid insert arrangements (note: size #8 cavities keyed for contact polarization)

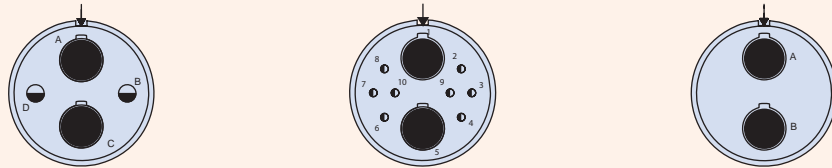
**Contact Legend**  
 #23 ● #22D ○  
 #16 ⊕ #20 ⊖  
 #12 ◐ #8 ◑



|                           |       |       |                 |                  |
|---------------------------|-------|-------|-----------------|------------------|
| <b>Insert Arrangement</b> | 9G5*  | 11-1  | 13-14           | 17-2             |
| <b>No. of Contacts</b>    | 1x #8 | 1x #8 | 1x #8   14x #23 | 1x #8   38x #22D |

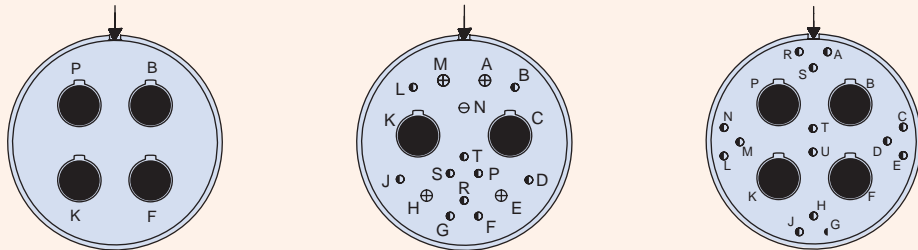
\*Only available with ground plane option

**Contact Legend**  
 #23 ● #22D ○  
 #16 ⊕ #20 ⊖  
 #12 ◐ #8 ◑



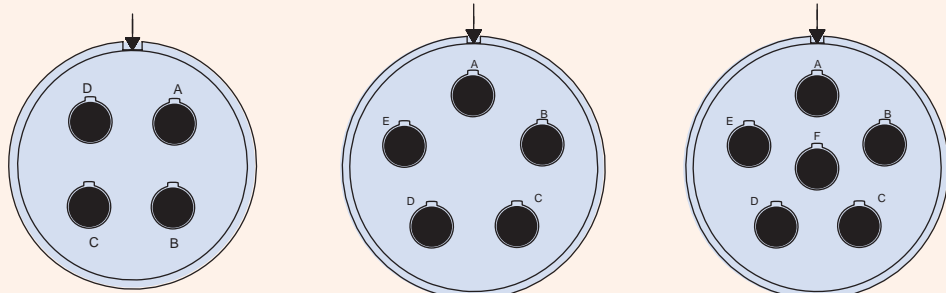
|                           |                |                |       |
|---------------------------|----------------|----------------|-------|
| <b>Insert Arrangement</b> | 17-22          | 17-60          | 17-75 |
| <b>No. of Contacts</b>    | 2x #8   2x #12 | 2x #8   8x #22 | 2x #8 |

**Contact Legend**  
 #23 ● #22D ○  
 #16 ⊕ #20 ⊖  
 #12 ◐ #8 ◑



|                           |       |                                    |                  |
|---------------------------|-------|------------------------------------|------------------|
| <b>Insert Arrangement</b> | 19-4  | 19-17                              | 19-18            |
| <b>No. of Contacts</b>    | 4x #8 | 2x #8   4x #16   1x #20   10x #22D | 4x #8   14x #22D |

**Contact Legend**  
 #23 ● #22D ○  
 #16 ⊕ #20 ⊖  
 #12 ◐ #8 ◑



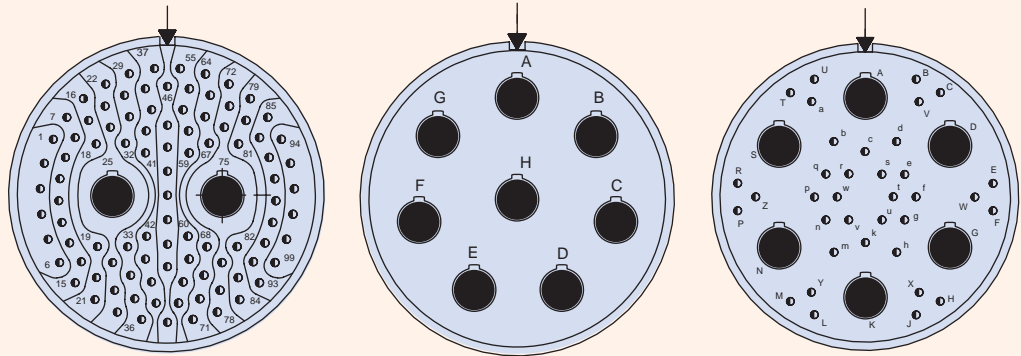
|                                 |       |       |       |
|---------------------------------|-------|-------|-------|
| <b>Insert Arrangement</b>       | 21-75 | 23-5  | 23-6  |
| <b>No. of Contacts and Size</b> | 4x #8 | 5x #8 | 6x #8 |

# SuperNine® High-speed connectors



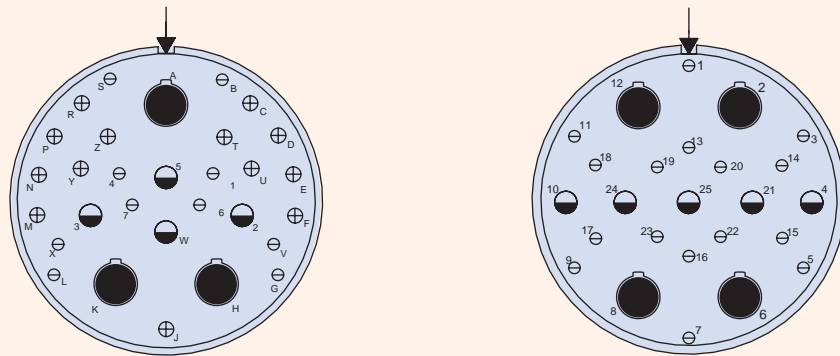
High-speed size #8 and hybrid insert arrangements  
(note: size #8 cavities keyed for contact polarization)

Contact Legend  
 #23 ● #22D ◦  
 #16 ⊕ #20 ⊖  
 #12 ◐ #8 ◑



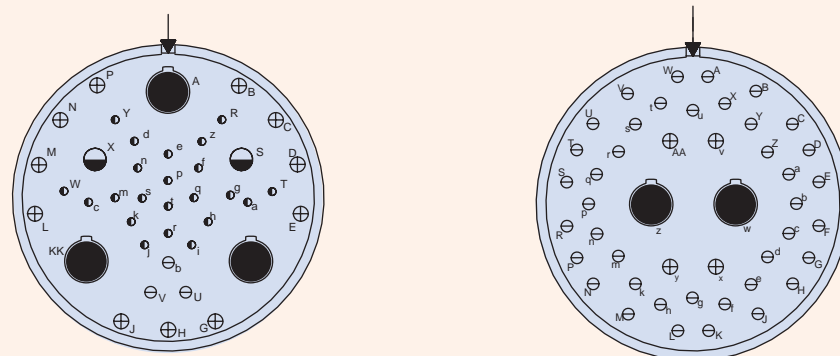
| Insert Arrangement       | 25-7  |         | 25-8  |       | 25-17   |  |
|--------------------------|-------|---------|-------|-------|---------|--|
| No. of Contacts and Size | 2x #8 | 97x #22 | 8x #8 | 6x #8 | 36x #22 |  |

Contact Legend  
 #23 ● #22D ◦  
 #16 ⊕ #20 ⊖  
 #12 ◐ #8 ◑



| Insert Arrangement       | 25-20 |        |         |         | 25-26 |        |         |
|--------------------------|-------|--------|---------|---------|-------|--------|---------|
| No. of Contacts and Size | 3x #8 | 4x #12 | 13x #16 | 10x #20 | 4x #8 | 5x #12 | 16x #20 |

Contact Legend  
 #23 ● #22D ◦  
 #16 ⊕ #20 ⊖  
 #12 ◐ #8 ◑



| Insert Arrangement       | 25-41 |        |         |        |          | 25-46 |        |         |
|--------------------------|-------|--------|---------|--------|----------|-------|--------|---------|
| No. of Contacts and Size | 3x #8 | 2x #12 | 11x #16 | 3x #20 | 22x #22D | 2x #8 | 4x #16 | 40x #20 |