PCB Connectors

The PCB connector is used when a permanent connection of flat cable to the PC board is required. The cable is terminated to the PCB connector making a reliable gas-tight connection with CW's patented Torq-Tite[™] contacts. The connector's pins are then soldered to the board.

CW's PCB connectors are approved by the U.S. Defense Department and are qualified to Mil-DTL-83503/23.





PCB Connector Features

- 10, 20, 26, 34, 40, 50, 60, pin versions
- Tin-lead plating, standard; gold plating also available
- Available with or without strain relief lip
- Available with or without cover lip for cable end or daisy chain application
- Rugged, lightweight UL 94V-0 thermoplastic construction
- Accepts 28-30 AWG stranded or solid conductors

Strain Relief

A molded-in strain relief is an optional feature on CW PCB connectors. (Specify CWR-140 or CWR-143 series). This lip, upon installation of the cover, creates a strain relief bend in the cable, inhibiting the transfer of any tension on the cable to the contact lines.

Cover Lip

For additional protection on cable end terminations, the CW PCB connector is available with a cover lip to insulate the ends of the cable's conductors. This eliminates possible "shorts" and allows you to position connectors more closely on your PC board. (Specify CWR-140 or CWR-141 series).

Assembly

To terminate CW PCB connectors to flat cable, use CT301 86/81 assembly press. The cable is applied directly to the IDC contacts in the connector base

and then the cover is assembled.









PCB Connectors

Engineering Dimensions

Dimensions

40

50

60

2.300 2.450

(58.42) (62.23)

2.800 2.950 (71.12) (74.93)

2.700

(68.58) (64.01)

3.200 3.020 (81.28) (76.71)

2.520



Specifications and Ordering Information Specifications (SP

- · Contacts: phosphor bronze standard
- Contact Plating: 100µ in. tin-lead, standard; 10µ in. gold over 50µ in. nickel, optional; 30µ in. gold over 50µ in. nickel, optional; 50µ in. gold over 50µ in. nickel, optional; 200µ in. tin-lead, optional
- · Insulator Material: UL 94V-0 flame retardant thermoplastic
- Color: blue

How to Order PCB Connectors

Type of Connector

- 142 = A PCB connector without strain relief for daisy chain
- 140 = A PCB connector with strain relief and cover lip
- 141 = A PCB connector without strain relief and with cover lip for cable end terminations
- 143 = A PCB connector with strain relief for daisy chain termination



- · Current Rating: 1A (maximum) per contact
- Dielectric Withstand Voltage: greater than 500 Vdc at sea level
- Insulation Resistance: greater than 5 x 10° ohms
- Cover pull-off force, without strain relief, 15 lb min. (force along contacts' primary axes)



How to Order PCB Cable Assemblies

Cable assemblies with two PCB Connectors, CWR-142-XX-0003, on a prescribed length of color-coded cable are available with the connectors oriented per drawing 35-1. (#1 contacts oriented to brown conductor.) For other lengths, orientations, numbers or combinations of connectors, contact the factory or your local value-added distributor.

