

CAPPED IDC 18-24 AWG: 9176-700

General Information



The 917X Series of Surface Mount Insulation Displacement Connectors (IDC) are designed to meet the harsh requirements of automotive and industrial applications. This industry proven series of connectors provides a robust, reliable, and efficient method to connect individual wires ranging from 12 AWG to 30 AWG directly to a PCB. The single-contact design can function as a stand-alone component. It gives our designers access to IDC technology in an easy-to-use form factor, allowing them to bring power and signal to a PCB in a wide range of applications. These connectors have been tested to various levels of shock, vibration and temperature cycling to prove their reliability and ruggedness.

The 9176-700 Series goes beyond the technical and performance attributes of our previous IDC connectors and improves the "ease of use" for terminating 18 to 24 AWG wires. The simplicity of inserting a wire into an SMT contact with the integrated retention/termination cap provides a wire-to-board solution without soldering or special tools. The wire is inserted into the cap (no stripping required) and then pressed down to provide a secure "gas tight" termination.

APPLICATIONS

- Connecting discrete wire components to a PCB
- Bringing power and signals onto a PCB
- Daisy chaining PCB's together to create a continuous string
- Applications Notes: Refer to 201-01-140
- Product Specification: Refer to 201-01-138

FEATURES AND BENEFITS

- IDC contact provides a gas-tight connection to the PCB for long term reliability
- Plastic cap retains the contacts in position prior to automatic placement, then acts as the assembly tool to terminate the wires; no special tooling.
- Tested to various levels of shock, vibration, and temperature cycling for reliability.
- Identical contact and footprint pattern as our standard 9176-000 series for full backward compatibility and functionality
- The IDC contact reduces the total applied cost versus solder or crimp processes
- Connectors are available in two configurations for maximum flexibility; Through Wire and Wire Stop

ELECTRICAL

- Current Rating: 10 Amps per Contact (Dependant on Wire Size)
- Voltage Rating: 300 VAC (RMS) or DC Equivalent,
- 1-Way Voltage Rating: 600 VAC (RMS) or DC Equivalent

ENVIRONMENTAL

- Operating Temperature: -40°C to +125°C
- Storage Temperature: -40°C to +70°C

MECHANICAL

- Insulator Material: Nylon UL94 V-0
- Contact Material: Phosphor Bronze
- Plating: Tin over Nickel

HOW TO ORDER

00 **9176** **00X**

Prefix Series Number of Ways

001 = 1
002 = 2
003 = 3
004 = 4
005 = 5

7XX

Wire Gauge Size
Capped - IDC Connector

Code	Accepted Wire Gauge	Wire Insulation
701	18 AWG	Ø 1.6 - 2.1
702	Stranded	Ø 1.1 - 1.6
711	20 AWG	Ø 1.6 - 2.1
712	Solid and Stranded	Ø 1.1 - 1.6
721	22 AWG	Ø 1.6 - 2.1
722	Solid and Stranded	Ø 1.1 - 1.6
731	24 AWG	Ø 1.6 - 2.1
732	Solid and Stranded	Ø 1.1 - 1.6

X

Insulator Color
All Sizes
9 = White
8 = Black

One Way Only (Special Order)

2 = Brown
3 = Blue
4 = Yellow
5 = Red
6 = Green
7 = Orange

X

Cap Options

Code	Cap Option	Description
0	Through Wire	Allows wire to be terminated at any point
9	Wire Stop	Terminates end of wire End Protected by stop face

6

Plating Option
6 = Pure Tin all over

SALES DRAWINGS
CLICK TO DOWNLOAD

Safety Standards: UL 1977-File #E90723, CSA C22.2 NO. 182.3

