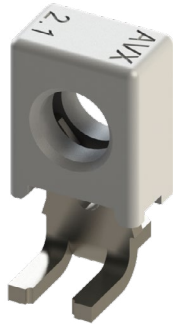


SINGLE TINE SMT 18-24 AWG: 9176-650

General Information



The 917X series of surface mount Insulation Displacement Connectors (IDC) were developed 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 standalone component. It provides 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 robustness.

The 9176-650 series offers a lower cost solution to the market with only a 10% reduction in current rating. The SMT footprint is backward compatible with the standard dual contact configurations; offers all the same wire gauges and termination benefits of the integrated cap and provides a 10% height reduction.

APPLICATIONS

- Machine Controls: motors, drives, solenoids, sensors, fans and pumps
- Commercial Buildings: controls, security, fire and sensors
- Smart Grid: meters, breakers and panels
- SSL/LED: bulbs, fixtures, signage and streetlights
- Application notes: Refer to 201-01-142
- Product Specification: Refer to 201-01-163

FEATURES AND BENEFITS

- IDC contact provides a gas-tight connection to the PCB for long term reliability
- Plastic cap retains the contact in position prior to automatic placement, then acts as the assembly tool to terminate the wires; no special tooling.
- Tested to various levels on shock, vibration and temperature cycling for reliability
- Identical contact and footprint pattern to the existing 9176 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: End and Through Wire

ELECTRICAL

- Current Rating: See matrix below
- Voltage Rating: 600 VAC (RMS) or DC Equivalent

ENVIRONMENTAL

- Operating Temperature: -40°C to +125°C
- Storage Temperature: -40 to +60°C

MECHANICAL

- Contact Material: Phosphor Bronze
- Contact Plating: Tin over Nickel
- Durability: 3 Cycles

HOW TO ORDER

00 9176 001
Prefix Series Number of Ways
001 = 1

65X
Contact Style

9
Color Option
9 = UL White

X
Cap Options

6
Plating Option
6 = Tin Plated

Code	Description	Accepted Wire Gauge	Wire Gauges
650	Capped IDC Connector SMT Mount	18 AWG Stranded	Ø1.6-2.1
651		20 AWG Solid and Stranded	Ø1.6-2.1
652		22 AWG Solid and Stranded	Ø1.1-1.6
653		24 AWG Solid and Stranded	Ø1.1-1.6

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


SALES DRAWINGS
CLICK TO DOWNLOAD

CURRENT RATING

18 AWG	20 AWG	22 AWG	24 AWG
9A	8A	6A	5A

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



The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

TDS-WTB-0020 | Rev 2