

IDC/Press-Fit WTB: 18-24AWG

53-8702



For more than a decade, insulation displacement contacts (IDC) and press-fit or compliant pin technology have been proven to be two of the most reliable contact systems in critical automotive systems such as: airbag, engine and transmission control units.

AVX has combined these two contact technologies into a new and unique, high reliability WTB connection system to replace traditional 2-Piece solutions, offering designers a new packaging option.

APPLICATIONS

- Automotive electronic systems

FEATURES AND BENEFITS

- Proven “gas tight” cold welded wire termination to PCB
- Redundant contact systems provides enhanced wire retention and PCB attachment
- Replace costly 2-Piece connector solutions

ELECTRICAL

- Current Rating:

AWG	Current (Amps)
18	10
20	9
22	7
24	6

- Voltage Rating: 125 VAC

ENVIRONMENTAL

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

MECHANICAL

- Contact Material: Tin Plated Copper Alloy
- Contact Plating: Pure tin over nickel
- Durability: 1 termination cycles

HOW TO ORDER

53

Prefix

53 = Finished Part

8702

Series

X

Number of Rows

1XX = 1
2XX = 2

005

Number of Ways

X01 = 1
X02 = 2
X03 = 3
X04 = 4
X05 = 5
X06 = 6
X07 = 7*
X08 = 8*

0XX

Hole Size

018 = 18 AWG
020 = 20 AWG
022 = 22 AWG
024 = 24 AWG

096

**Serialized
Project
Number**

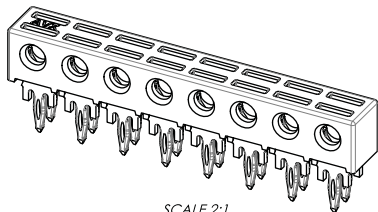
*7 and 8 way only available
in dual row version

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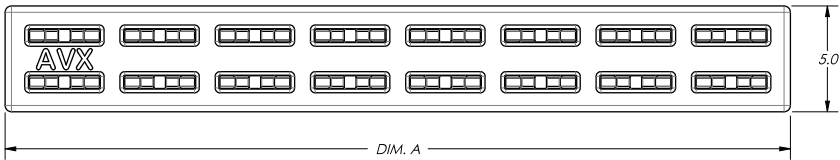
WIRE-TO-PCB CONNECTOR – DUAL ROW IDC TO COMPLIANT TAIL



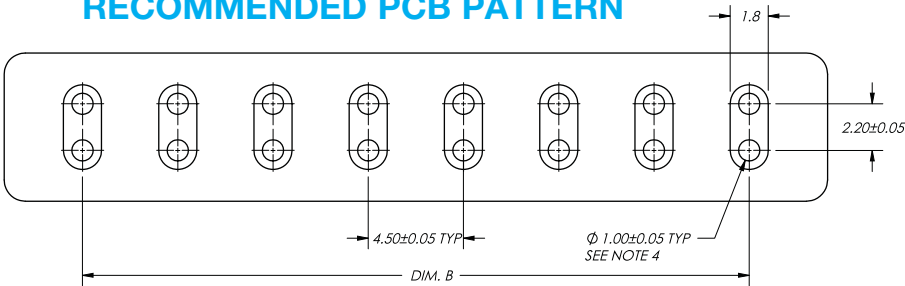
SCALE 2:1

Positions	Dim. A	Dim. B	Approx. Parts/Tube
1	5.6	N.A.	100
2	10.1	4.50	56
3	14.6	9.00	40
4	19.1	13.50	30
5	23.6	18.00	24
6	28.1	22.50	20
7	32.6	27.00	17
8	37.1	31.50	15

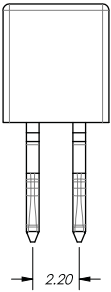
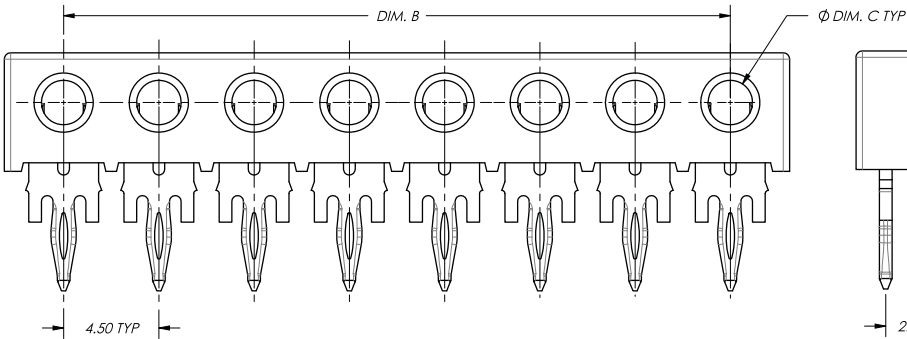
Wire Gauge	Dim. C	Wire Insulation
18 Awg Stranded	2.1	1.6 - 2.1
20 Awg Solid/Stranded	2.1	1.6 - 2.1
22 Awg Solid/Stranded	1.6	1.1 - 1.6
24 Awg Solid/Stranded	1.6	1.1 - 1.6



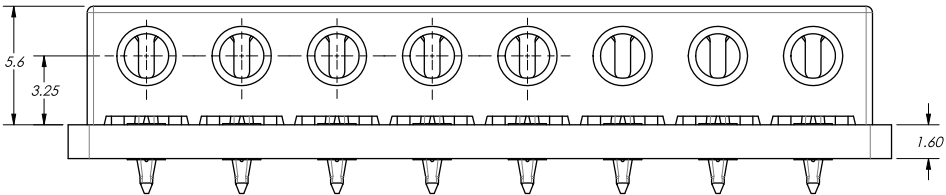
RECOMMENDED PCB PATTERN



- NOTES:
1. HOUSING MATERIAL: GLASS-FILLED PBT.
 2. CONTACT MATERIAL: TIN PLATED COPPER ALLOY.
 3. PART CONTAINS TWO CONTACTS PER POSITION.
 4. PLATED-THROUGH PCB HOLES TO MEET THE FOLLOWING: DRILL DIAMETER: 1.150/1.125; COPPER PLATING: 0.025 MIN; FINAL PLATED HOLE DIAMETER: 0.95/1.05. REF IEC 60352-5.
 5. FOR INSTALLATION OPTIONS AND FIXTURES, SEE PAGE 4.
 6. PARTS TO BE PACKAGED IN 699MM LONG ANTI-STATIC TUBES; NUMBER OF PARTS PER TUBE IS AS SHOWN IN THE TABLE.
 7. GENERAL TOLERANCE 0.20 UNLESS OTHERWISE STATED.



PART MOUNTED ON PCB

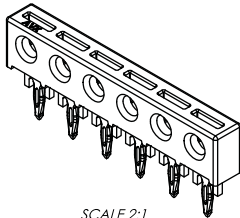


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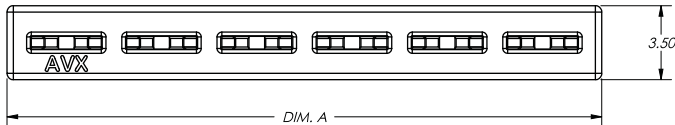
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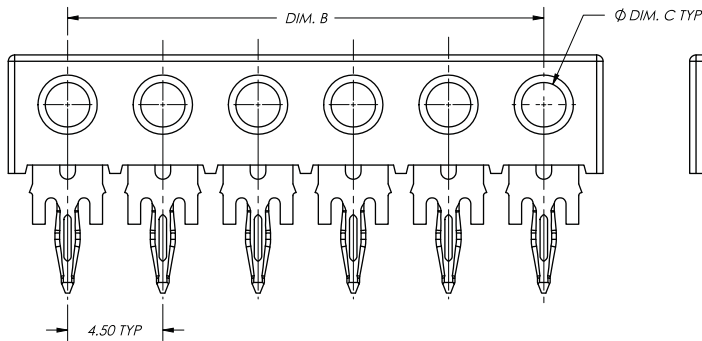
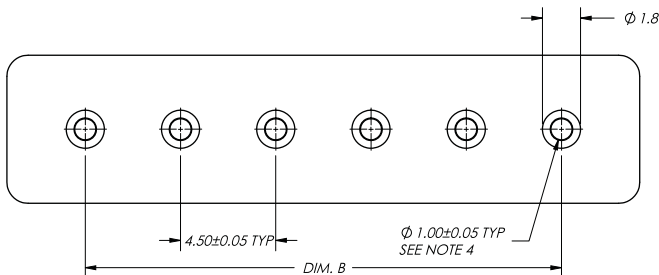
WIRE-TO-PCB CONNECTOR – SINGLE ROW IDC TO COMPLIANT TAIL



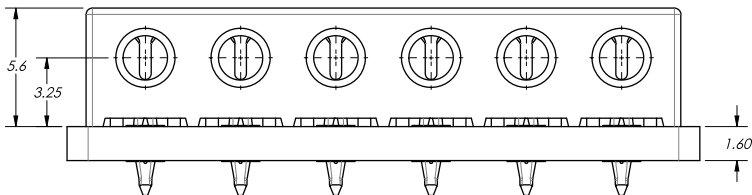
SCALE 2:1



RECOMMENDED PCB PATTERN



PART MOUNTED ON PCB



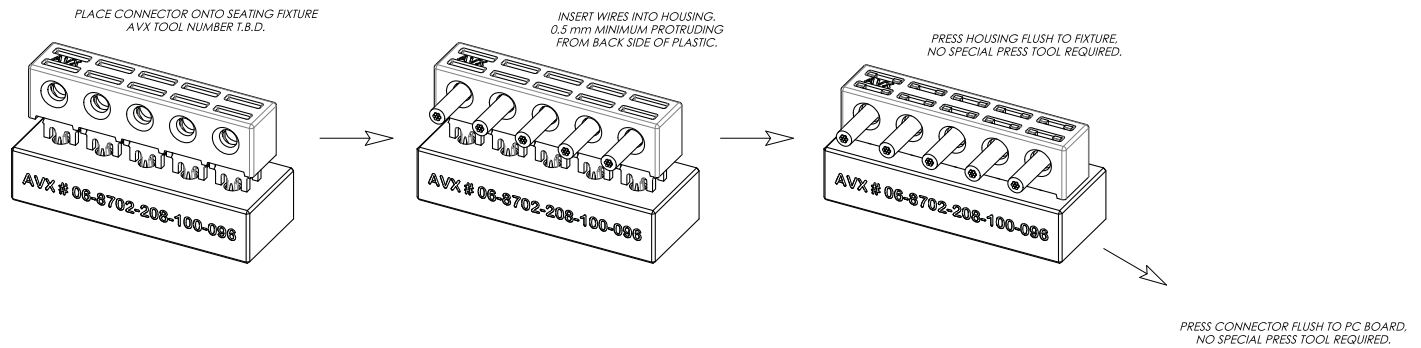
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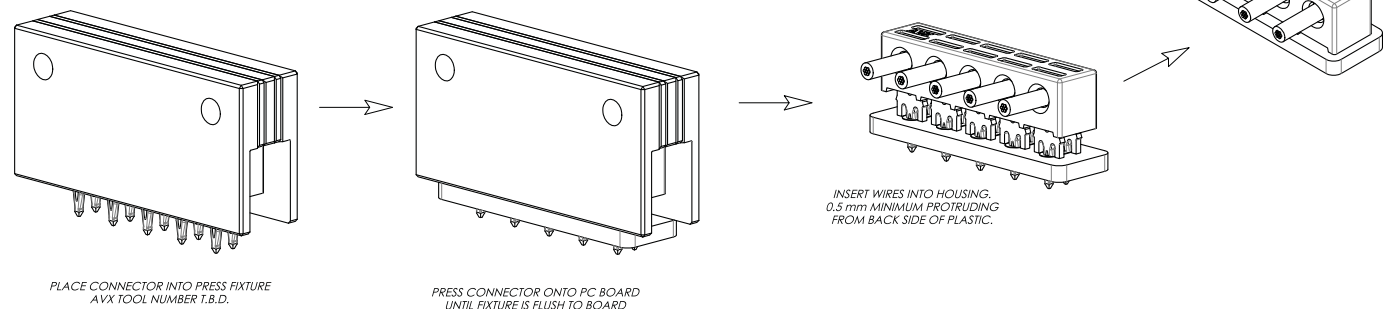
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TERMINATION/MOUNTING OPTION 1 WIRES FIRST, PCB SECOND



TERMINATION/MOUNTING OPTION 2 PCB FIRST, WIRES SECOND



Mouser Electronics

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