≣FCi Basics

Amphenol ICC

Minitek MicroSpace™ Crimp-To-Wire Connector Platform

COMPACT, ROBUST AND VERSATILE CONNECTOR SYSTEM

Minitek MicroSpace[™] Crimp-to-Wire connector platform's unique design enables LV214 Severity-2 and performs at 1.8, 1.5 and 1.27mm pitch. Minitek MicroSpace[™] will be available in single and double row versions, with top and side latch configuration.

- LV214 Severity-2 Compatible
- Keying to prevent visual mismatching
- Terminal Positioning Assurance (TPA)
- Primary and secondary contact retention
- Connector Positioning Assurance (CPA)



FEATURES

- Design based on existing and proven design controls
- Existing crimp section and automated crimp tooling up to 22AWG
- 4N normal force for vibration and >75N connector locking strength
- Poka yoke polarization
- Terminal Positioning Assurance (TPA)
- Current rating up to 4A per contact
- Connector Positioning Assurance (CPA)

BENEFITS

- Suitable for harsh environments
- No specific industrial tools required
- High vibration and locking resistance
- Visual mismatching prevention system
- Ensures proper terminal insertion position and retention
- Meets higher power performance requirements
- Assures that connectors are properly mated and locked together

TECHNICAL INFORMATION

MATERIAL

- Contact for Board Header Connector: High Current Alloy with optional Tin and Gold/ GXT plating
- Housing: High temperature thermoplastic, UL94V-0
- Crimping Terminal: High Current Alloy with optional Tin and Gold/GXT plating

MECHANICAL PERFORMANCE

- Terminal Insertion Force/Terminal: <3N
- Terminal Retention into Housing: >50N
- Durability: 20 mating cycles for Sn; 100 mating cycles for Au/GXT
- Wire Pullout Force for 0.35qmm²: >50N min

APPROVALS AND CERTIFICATIONS

LV214 – Severity 2 Compatible

PACKAGING

- PCB Header: Tape & Reel
- Receptacle Housing: Bag
- Terminal: Reel

PART NUMBERS

ELECTRICAL PERFORMANCE

- Low Level Contact Resistance: <30m Ω
- Insulation Resistance: >100MΩ
- Voltage Rating: 48V
- Current Rating: 4A
- Dielectric Withstanding Voltage: 500VAC
- Temperature Rise: 30°C max.

ENVIRONMENTAL

• Operating Temperature: -40°C to +130°C

TARGET MARKETS/APPLICATIONS



Camera/Sensor Cluster/Navigation HVAC Headliner Lighting Power Steering Radio/ DVD



Lighting

Description			Configuration			
Pitch	Versions	No. of Positions	Header Assembly (Horizontal)	Header Assembly (Vertical)	Receptacle Assembly	Crimp-to-Wire Receptacle
1.27mm	Staggered	2–3	10142396*	10142407*	10142395*	10141272*
		4–16	10142344*	10143535*	10142348*	10141272*
1.50mm	Single Row	2–3	10142534*	10143714*	10142532*	10141272*
		4–15	10142853*	10143716*	10142851*	10141272*
1.80mm	Single Row	2–3	10142936*	10143920*	10142934*	10141272*
		4–15	10142963*	10143922*	10142961*	10141272*

*denotes base part number. Please contact Amphenol ICC for complete part numbers.

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