

# 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 1.80mm, 1.50mm 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)



### TARGET MARKETS



## 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)
- Low insertion force terminal available

## 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
- Makes it easier to mate with receptacle

## 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
- <2N low insertion force terminal available upon request
- Terminal Retention into Housing: >50N
- Durability: 20 mating cycles for Sn; 100 mating cycles for Au/GXT®
- Wire Pullout Force for 0.35qmm<sup>2</sup>: >50N min.

### APPROVALS AND CERTIFICATIONS

- LV214 – Severity 2 Compatible

### PACKAGING

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

### ELECTRICAL PERFORMANCE

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

### ENVIRONMENTAL

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

### TARGET MARKETS/APPLICATIONS



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



Lighting

## PART NUMBERS

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 for complete part numbers.