

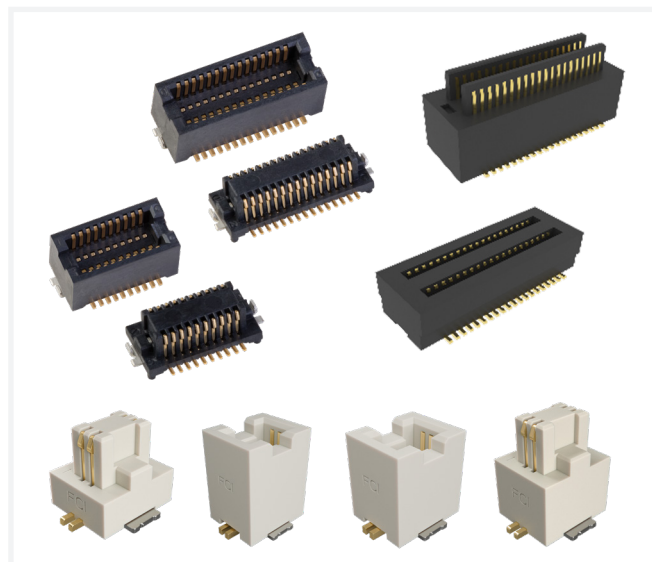
BergStak® 0.5mm Mezzanine Connector

Expanded product range

RELIABLE SOLUTION FOR HIGH DENSITY APPLICATIONS

Amphenol's BergStak® 0.5mm is a comprehensive and versatile board-to-board solution designed for reliable and high-density applications. The unique design of scoop-proof housing ensures terminals are not damaged during mating.

- 0.5mm double row contact for high density connector
- Scoop-proof housing ensures terminals are not damaged during the mating
- PCB locator pegs option helps to ease manual assembly



TARGET MARKETS



FEATURES

- 0.5mm double row contact
- Scoop-proof housings
- Metal hold-down option
- Locating pegs option
- 3mm to 6mm stack heights in 0.5mm increments, with 10 to 80 positions in 10 position increments
- 7mm to 8.5mm stack heights in 0.5mm increments, with 10 to 100 positions in 10 position increments
- 4 position expand to 6 and 8 position, with 6mm to 8.09mm stack heights
- Available in UL94 V0
- RoHS compliant and lead-free
- USCAR-2 V2 shock and vibration qualified

BENEFITS

- High density connector
- Ensures terminals are not damaged during mating
- Higher retention force
- Eases manual assembly
- Wide range of sizes and stack heights supports different applications
- High flammability rating
- Meets environmental, health, and safety requirements
- Suitable for automotive applications

TECHNICAL INFORMATION

MATERIAL

- Housing: High temperature thermoplastic UL94V-0, LCP
- Terminal: Copper Alloy
- Metal Hold-down: Copper Alloy
- Plating: Gold Flash

MECHANICAL PERFORMANCE

- Mating Force: 1.47N per pin max.
- Unmating Force: 0.15N per pin min.
- Retention Force: 0.98N per pin min.
- Durability: 50 mating cycles
- Shock and Vibration: USCAR-2 V1

ELECTRICAL PERFORMANCE

- Current Rating per Contact: 0.5A per contact with all pins powered; 1A min @ 4 Pin
- Insulation Resistance: 500MΩ min.
- Voltage Rating: 50VAC
- Speed: Up to 2Gb/s

ENVIRONMENTAL

- Salt Spray Test:
 - 5±1% salt concentration 48 ± 4 hours 35 ± 2 °C
- Thermal Shock: -65°C to +125°C
- High Temperature: 85 ± 2 °C for 96 hours
- Humidity:
 - Temperature: 40 ± 2 °C 96 hours
 - Relative Humidity: 90-95%
 - Duration: 96 Hours

SPECIFICATIONS

- Product Specification:
 - 10132797/10132798: GS-12-1298
 - 10166148/10166149: GS-12-1298
 - 10165430/10165431: GS-12-1953

PACKAGING

- Tape & Reel

TARGET MARKETS/APPLICATIONS



Automotive ADAS



Digital Video Camera



Measurement Equipment
Mobile Payment Device
Point of Sales Equipment
Portable Industrial Terminal
Surveillance Camera

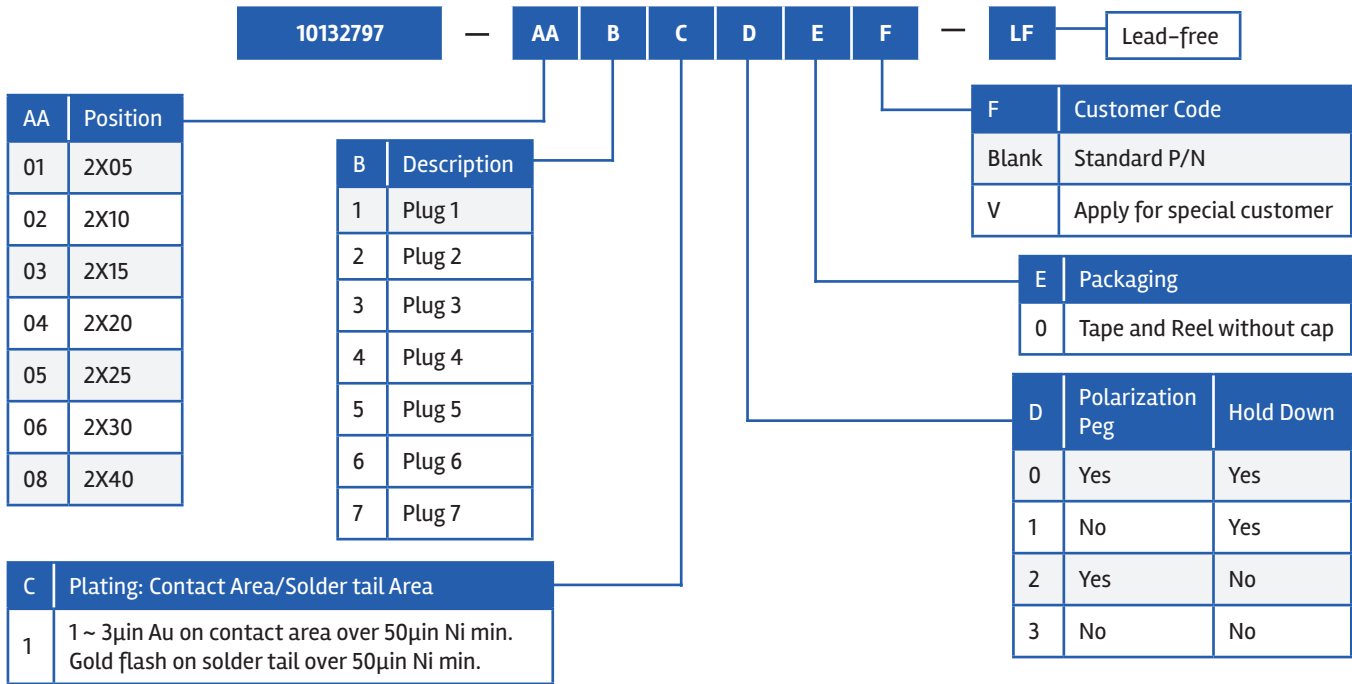


Medical Device

PART NUMBERS – 3–6MM HEIGHT

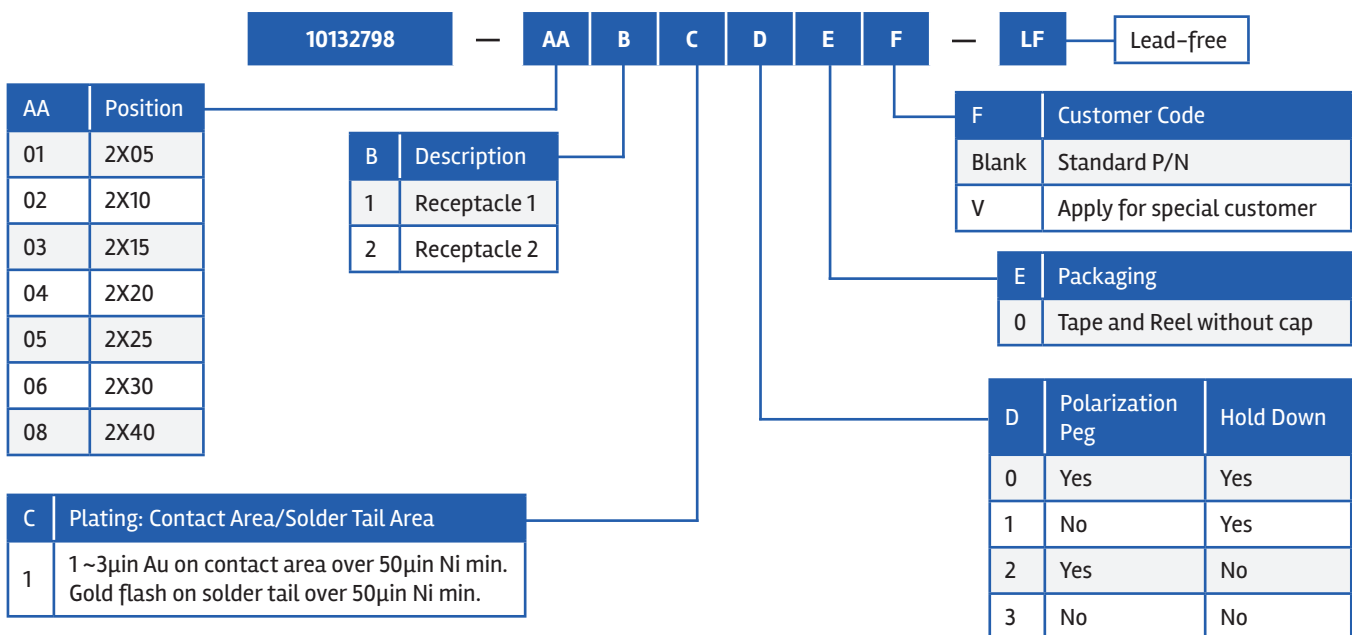
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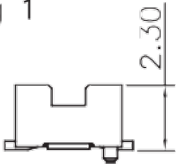
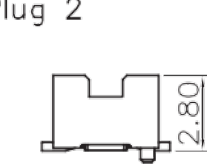
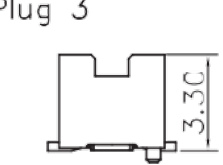
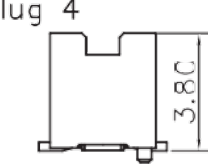
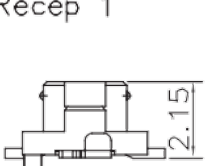

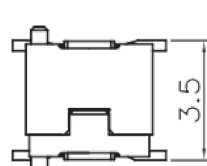
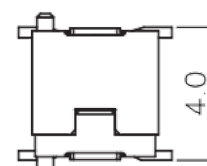
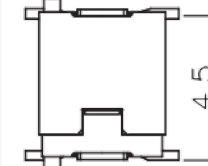
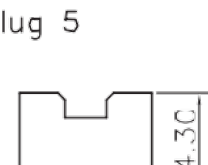
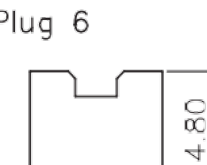
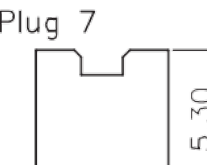
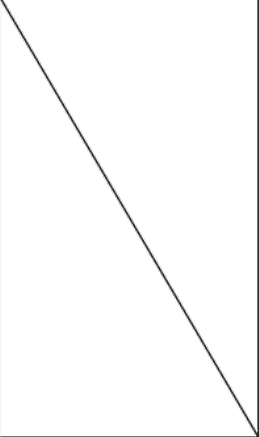
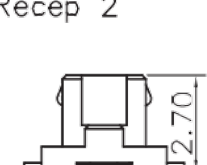
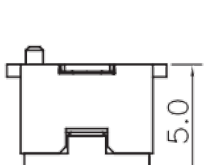
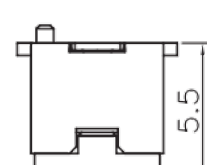
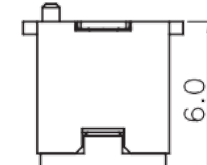


PART NUMBER SELECTOR – RECEPTACLE

Find part number details using the search box on www.amphenol-cs.com



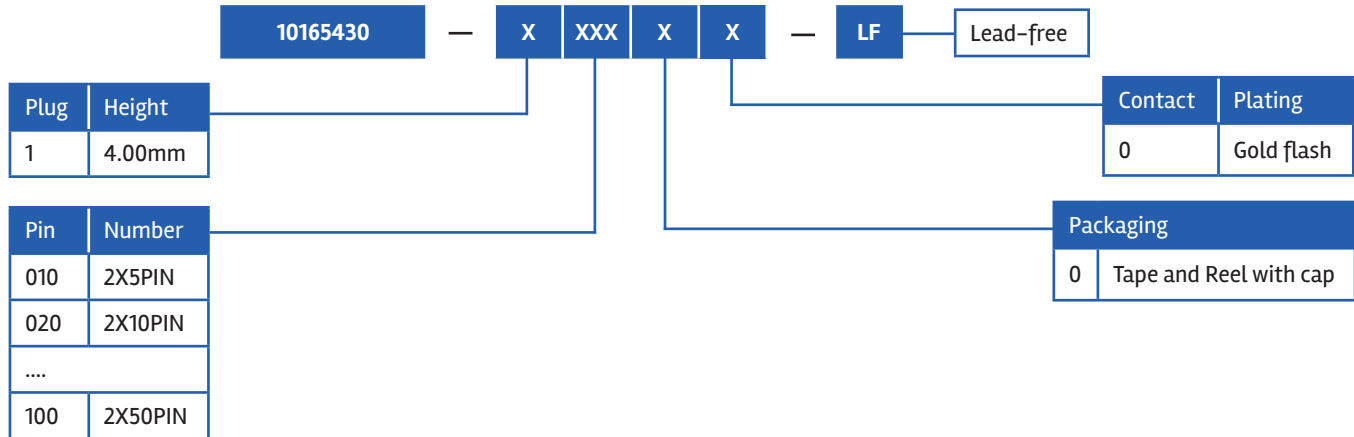
AVAILABLE STACK HEIGHTS

| | | 10132797 SERIES (PLUG SERIES) | | | |
|-------------------------------|---|---|---|--|---|
| 10132798 SERIES (REC. SERIES) | COMBINATION OF MATED HEIGHT 3.0~4.5mm | Plug 1  | Plug 2  | Plug 3  | Plug 4  |
| | Recep 1  |  |  |  |  |
| 10132798 SERIES (REC. SERIES) | COMBINATION OF MATED HEIGHT 5.0~6.0mm | Plug 5  | Plug 6  | Plug 7  |  |
| | Recep 2  |  |  |  | |

PART NUMBERS – 7–8.5MM HEIGHT

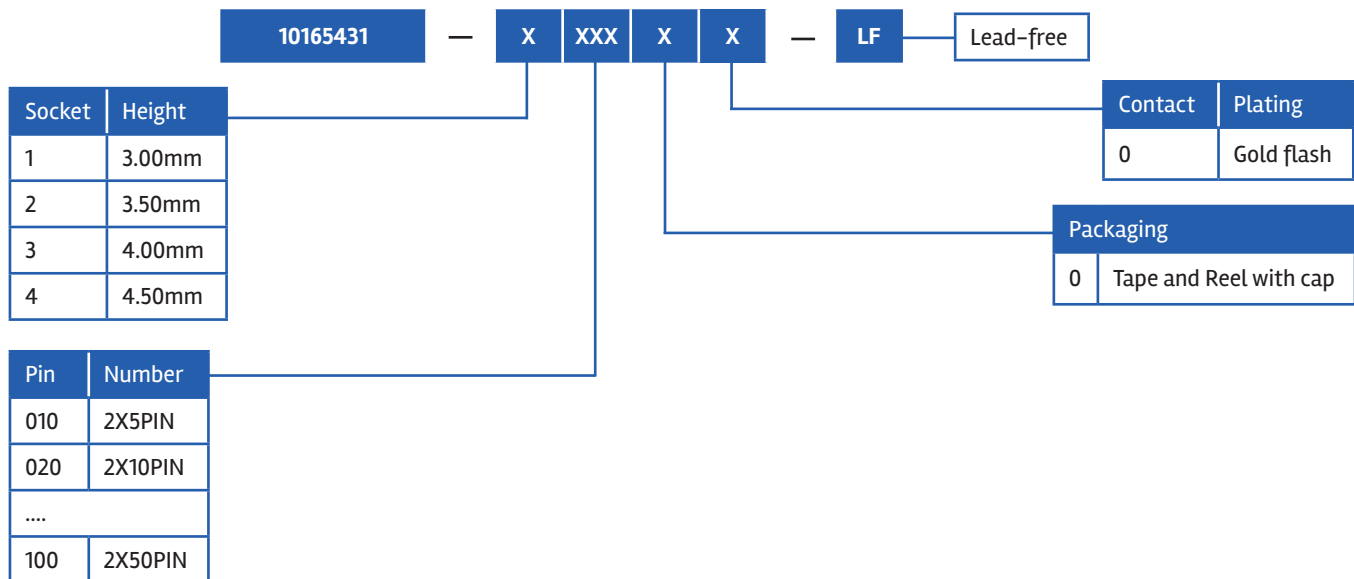
PART NUMBER SELECTOR – HEADER

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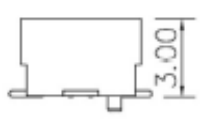


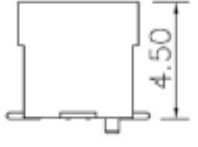
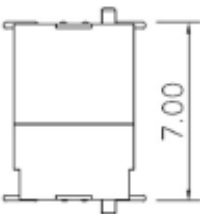
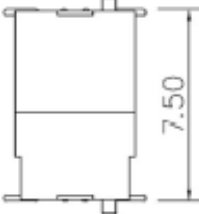
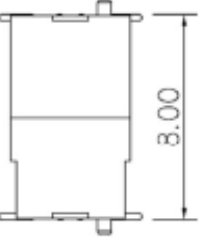
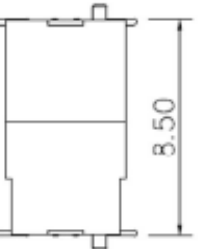


PART NUMBER SELECTOR – RECEPTACLE

Find part number details using the search box on www.amphenol-cs.com



AVAILABLE STACK HEIGHTS

| | | 10165431 SERIES (REC. SERIES) | | | |
|--|--|---|---|--|---|
| COMBINATION OF MATED HEIGHT 7.0~8.5mm | | REC. 1 | REC. 2 | REC. 3 | REC. 4 |
| 10165430 SERIES (PLUG SERIES) | PLUG. 1  |  |  |  |  |
| | |  |  |  |  |

PART NUMBERS – LOW PIN COUNT

PART NUMBER SELECTOR – HEADER

Find part number details using the search box on www.amphenol-cs.com

10166148

XX

X

X

X

X

X

LF

Lead-free

| Pin | Number |
|-----|--------|
| 04 | 2X02 |

| Height Option | |
|---------------|--------|
| 1 | 5.19mm |
| 2 | 4.39mm |

| Plating | |
|---------|-----------------------------|
| 1 | 1-3µin AU on contact area |
| | 1µin min. AU on solder area |

| Hold Down Option | |
|------------------|----------------|
| 0 | With hold down |

| | |
|-------|----------------------------|
| V | Apply for special customer |
| Blank | For standard customer |
| 0 | Tape and Reel without cap |

PART NUMBER SELECTOR – RECEPTACLE

Find part number details using the search box on www.amphenol-cs.com

10166149

XX

X

X

X

X

X

LF

Lead-free

| Pin | Number |
|-----|--------|
| 04 | 2X02 |

| Height Option | |
|---------------|-------|
| 1 | REC 1 |
| 3 | REC 3 |

| Plating | |
|---------|-----------------------------|
| 1 | 1-3µin AU on contact area |
| | 1µin min. AU on solder area |

| Hold Down Option | |
|------------------|----------------|
| 0 | With hold down |

| | |
|-------|----------------------------|
| V | Apply for special customer |
| Blank | For standard customer |
| 0 | Tape and Reel without cap |

AVAILABLE STACK HEIGHTS

| | | 10166149 | |
|-----------------------------|----------|----------|-------|
| COMBINATION OF MATED HEIGHT | | REC 1 | REC 3 |
| 10166148 | | | |
| | HEADER 1 | | |
| | HEADER 2 | | |
| | | | |