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Miniature and mechanically resilient compression connectors provide excellent electrical contact for reliable operations in ultra-slim mobile devices

Features and Benefits

Low Level Contact Resistance (LLCR) of 30 milliohms (78864)	Assures operational performance of connector at extremely low current levels
Low Working Height of 1.20mm (78864)	Significant vertical space savings for ultra-slim applications
Dimpled mating contacts (78864)	Maintains high contact pressure for enhanced electrical reliability
High terminal retention force (78864 and 78732)	Protects terminal solder joints against compressive stresses during mating
Titanium Copper (Ti Cu) contacts (78864 and 78732)	High mechanical strength of contacts sustains contact pressure when mated
High shock resistance of up to 30G (78732) and 50G (78864)	Ensures uninterrupted electrical connectivity in shock conditions
Small connector footprints	Provide maximum PCB real-estate savings

Applications

Smartphones and Mobile Devices

- Other Mobile Devices
 - Smartphones
 - Tablet PCs
 - Phablets (a larger category of smart phones that combines the functionality of smart phones with those of tablets)

Industrial

- Communication handsets
- Walkie Talkies



Tablet PCs



Smartphones



Phablets

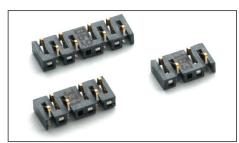
Compression Connectors for Mobile Devices Dual-row, SMT, Halogen-free

78864 Linear contacts, 4 and 6 circuits (1.60mm pitch)

78732 Staggered contacts; 4, 6 and 8 circuits (Refer to Sales Drawing for pitch measurements)



4 and 6-Circuit Compression Connectors (Series 78864 with linear contacts)

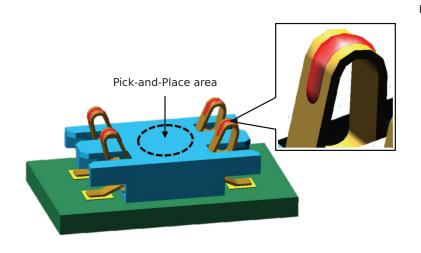


4, 6 and 8-Circuit Compression Connectors (Series 78732 with staggered contacts)

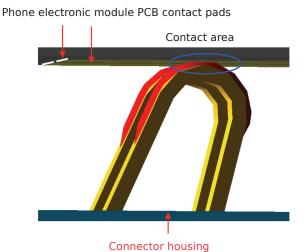


Compression Connectors for Mobile Devices Dual-row, SMT, Halogen-free

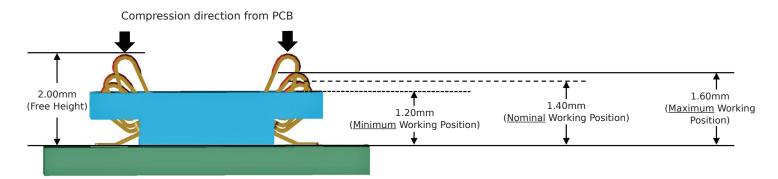
Product Features - Series 78864 Connector



Magnified view of the Series 78864 connector's dimpled (or embossed) contact terminal



The dimple's reduced contact radius, width and area (blue circle) provide increased contact pressure (and electrical reliability) when pressed against the electronic module PCB contacts

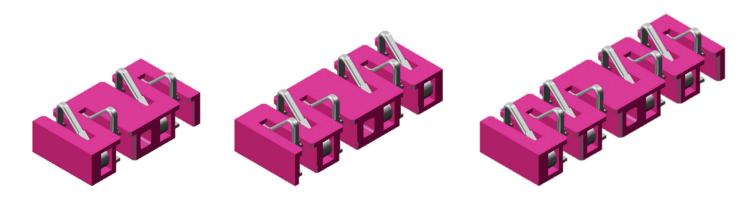


Working heights of the Series 78864 connectors. At maximum compression, the working height of 1.20mm is flush with the height of the connector housing. At this working position, the deflected terminals do not protrude from the connector housing, which prevents potential electrical shorting with adjacent components

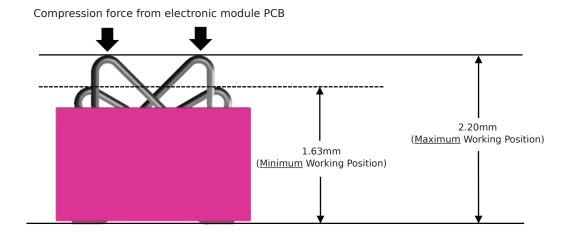


Compression Connectors for Mobile Devices Dual-row, SMT, Halogen-free

Product Features - Series 78732 Connector



Staggered 4, 6 and 8-circuit configurations of the Series 78732 compression connectors



The Series 78732 compression connector has a working height of 1.63mm

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Specifications

Reference Information

Packaging: Embossed Tape Reel

Mates/Use with:

Electronic module and PCB contacts

Designed In: Millimeters

RoHS: Yes

Halogen Free: Yes

Glow Wire Compliant: No

Electrical

Voltage (max.):

30V (78732); 10V DC (78864)

Current (max.): 1.0A per contact

Low Level Contact Resistance (max.):

70milliohm (78732); 30milliohm (78864)

Dielectric Withstanding Voltage:

500V RMS (78732); 100V AC (78864)

Insulation Resistance:

100 megohm (78732);

1000 megohm (78864)

Mechanical

Contact Normal Force:

0.59N at 1.63mm

Working Height (78732);

1.00N at 1.20mm

Working Height (78864)

Terminal Retention Force (min.):

0.98N (78732); 1N (78864)

Durability (min.):

20 cycles (78732); 30 cycles (78864)

Physical

Housing:

LCP, 30% Glass-filled, Black (78732)

LCP, Glass-filled, Black (78864)

Contact:

Titanium Copper

(78762 and 78864)

Plating:

Contact Area —

0.38micron Gold (78732);

0.10micron Gold (78864)

Solder Tail Area — 1.27micron Matt Tin Underplating — 1.27micron Nickel

Operating Temperature: -40 to +85°C

Compression Connectors for Mobile Devices Dual-row, SMT, Halogen-free

Ordering Information

Part No.	Circuits	Contacts	Working Height (mm)	Mated Height at maximum compression (mm)	Connector Dimension (mm)
<u>78732-4001</u>	4	Staggered	1.63	1.40	5.50 by 3.00
<u>78732-6021</u>	6				7.50 by 3.00
<u>78732-8021</u>	8				9.50 by 3.00
<u>78864-0001</u>	4	Linear	1.20	1.20	3.20 by 5.00
78864-1001	6				4.80 by 5.00

www.molex.com/product/compression.html