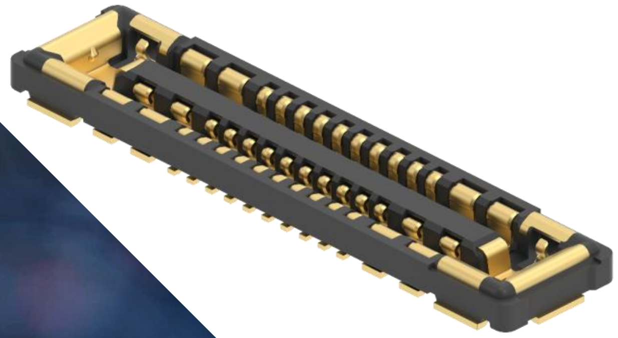
VERSAPOWER CONNECTORS



VersaPower Connectors

Featuring a fine 0.30mm pitch and a compact mated height of only 0.60mm, VersaPower is a next-generation embedded connector system engineered to meet the demanding needs of modern electronics. VersaPower Connectors support up to 15.0A power contacts while affording low contact resistance and minimal temperature rise.

Series

226276 **0.30 BB VersaPower GD6 REC PKG 20 circuit**

226277 **0.30 BB VersaPower GD6 PLUG PKG 20 circuit**

View Product Landing Page

Download Datasheet

Key Specifications	
Current (max.)	15.0A
Number of Circuits	20 to 80
Pitch	0.30mm
Voltage (max.)	50V

Product Overview

VersaPower Connectors

Trends and Challenges

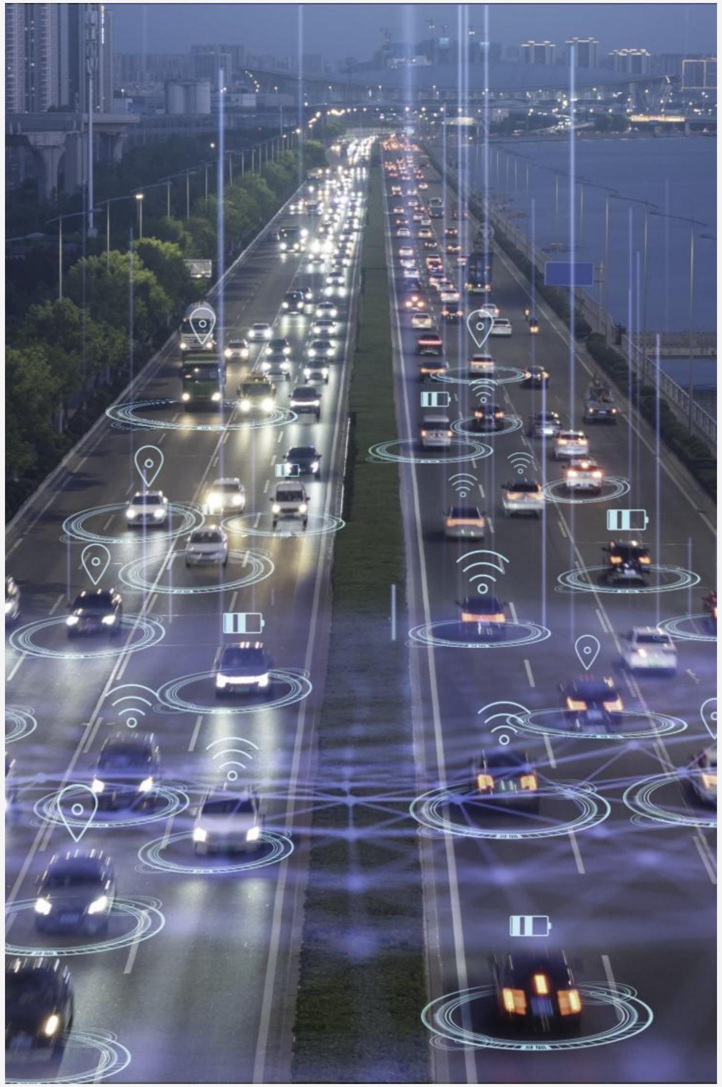
As industries increasingly demand high-density and high-current connectors, customers require connectors that support higher currents in smaller footprints. With increased durability expectations, automotive, industrial and consumer industries demand connectors that survive extreme temperatures, vibration and multiple mating cycles. If design engineers continue using legacy solutions, they often face the challenge of compromised product reliability, delayed launches and missed opportunities in competitive markets.

Industry Needs

Industry customers need connectors that offer various mechanical configurations to fit diverse design requirements. By addressing overheating challenges with products that minimize heat generation, designers can minimize energy loss, enhancing electrical conductivity and overall performance. Solutions that allow for easy connector mating and reliable safety measures help prevent harm to operators. Customers also face the challenge of inconsistent performance.

Product Solutions

VersaPower Connectors feature a high power of 15.0A that helps maintain stable performance in high-current supporting applications. These connectors offer compact sizes with robust mechanical and electrical reliability, which is essential for space-constrained and high-density electronic assemblies. VersaPower Connectors increase ease of assembly, improving manufacturing efficiency and product quality. They are designed to endure demanding environments, offering exceptional resistance to vibration, extreme temperatures and moisture. Their robust construction ensures long-term reliability and minimizes maintenance requirements.

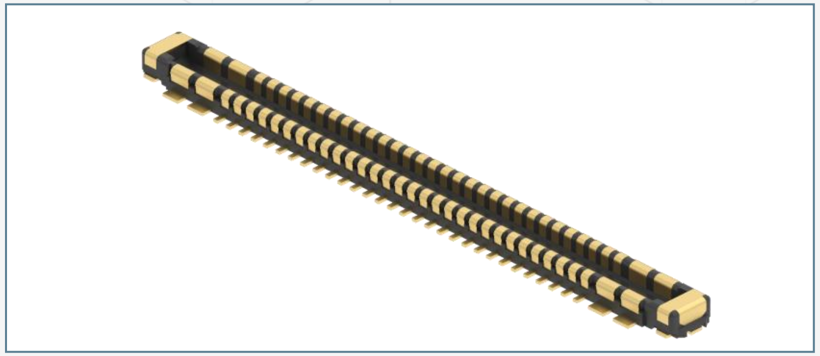


Vital Product Information

VersaPower Connectors

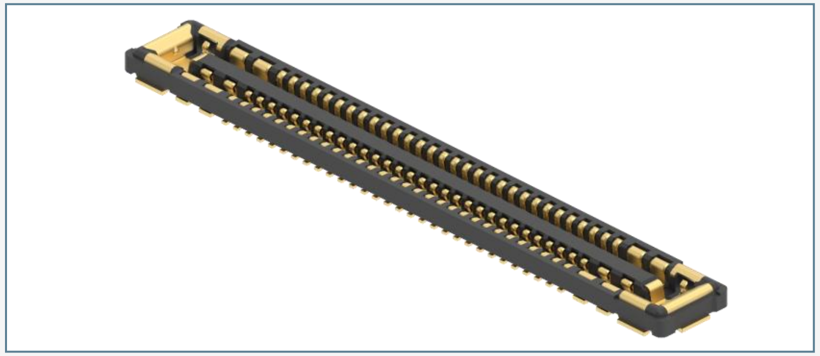
High Performance

With lower resistance (LLCR), VersaPower Connectors reduce heat generation and minimize energy loss, improving electrical conductivity and overall system performance.



Compact and Robust

The compact design of VersaPower Connectors increases space savings in portable and high-density applications. The robust design of the connectors enables them to withstand shocks, vibrations and harsh environmental conditions, reducing failure risks and enhancing overall reliability.



Easy Assembly

The larger alignment features of VersaPower Connectors ensure easy, secure connections, improving assembly accuracy and manufacturing efficiency. Also, the design of the connectors simplifies assembly and maintenance, reducing downtime and lowering production costs.

Product Advantages and Features

VersaPower Connectors

Enhances electrical conductivity
The lower resistance of these connectors minimizes energy loss by reducing heat generation.

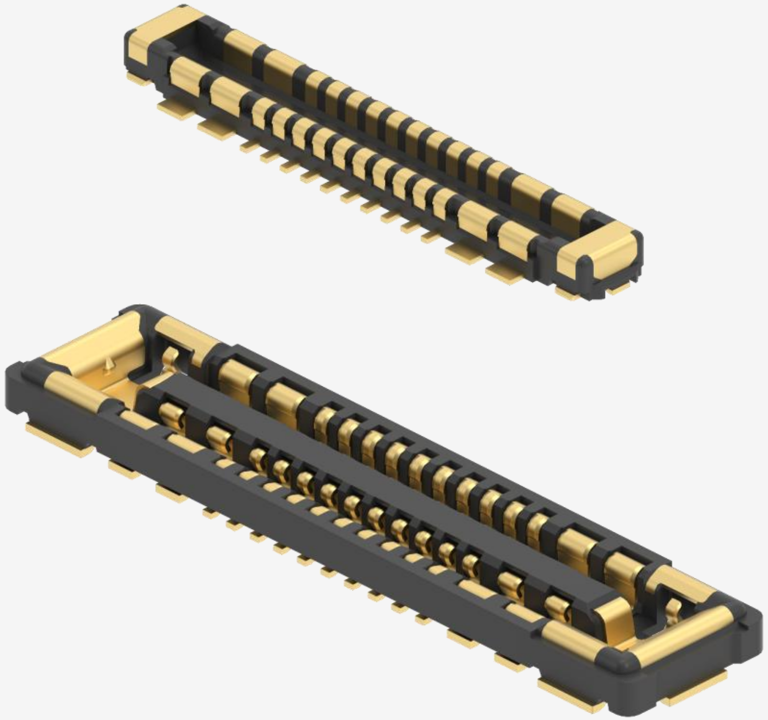
Improves manufacturing efficiency and product quality
The larger alignment features of the connectors simplify assembly and maintenance, reducing downtime and production costs.

Delivers high mechanical reliability
The robust design of the connectors helps withstand shocks and vibrations, reducing the risk of failures.

Helps maintain stable performance in high-current and high-power environments
The connectors are designed to handle currents up to 15.0A, which prevents overheating and failures due to excessive current flow.

Enables miniaturization of devices
The compact design of the connectors allows designers to fit them into small spaces, which helps save space in portable applications.

Improves product lifespan under harsh conditions
The high durability and environmental resistance of the connectors help withstand extreme temperatures, moisture and corrosion.



Markets and Applications

VersaPower Connectors

Refrigerators

Car Infotainment Systems

Robotic Arms

APPLIANCES

- Refrigerators
- TVs
- Washing machines

AUTOMOTIVE

- Advanced driver assistance systems
- Car infotainment systems
- Engine control units

INDUSTRIAL AUTOMATION

- Factory automation equipment
- Robotic arms

Markets and Applications

VersaPower Connectors

Patient-Monitoring Devices

Tablets

Routers

MEDTECH

- Diagnostic equipment
- Patient-monitoring devices

MOBILE DEVICES

- Laptops
- Personal computing devices
- Smartphones
- Tablets

NETWORKING

- Routers
- Switches
- Wireless access points

Markets and Applications

VersaPower Connectors

Fitness Trackers

WEARABLES

- Fitness trackers

Frequently Asked Questions

VersaPower Connectors

What are VersaPower Connectors?

VersaPower Connectors are board-to-board connectors that integrate high-current circuits with larger circuits, delivering dependable power and signal transfer in a space-efficient design. They are appropriate for applications that need both power and signal connections with robust electrical and mechanical performance. These connectors meet the requirements of modern electronic systems that depend on streamlined power and signal integration.

What makes VersaPower Connectors different from the competition?

VersaPower Connectors have lower resistance, higher power and a wide range of circuits, supporting the key market demands and trends seeking high-performance and high-reliability solutions.

How do VersaPower Connectors create value for customers?

The lower resistance of the VersaPower Connectors enhances electrical conductivity by reducing energy loss, minimizing heat generation and improving overall efficiency. The compact and robust design of the connectors supports device miniaturization and saves space in portable applications. The connectors also provide increased reliability and resistance to shocks and vibrations, reducing the risks of failure.

Unique and Useful Differentiation vs. Similar Molex Products

VersaPower Connectors

	Molex | VersaPower Connectors		Molex | SlimStack ACB6+ Connectors		Molex | SlimStack GCB7X Connectors	
Series Number	**Receptacle**	**Plug**	**Receptacle**	**Plug**	**Receptacle**	**Plug**
	226276	226277	216700	216701	216656	2166657
Pitch (mm)	0.30		0.35		0.40	
Length (mm) * TP = [(circuit/2]-1) x pitch	TP+5.30		TP+2.80		5.00	
Current	Signal: 0.3A Nail and Power: 15.0A		Signal: 0.3A Nail: 5.0A		Signal: 0.3A Nail and Power: 15.0A	
Operating Temperatures	-40 to +85°C		-40 to +85°C		-40 to +85°C	

Product Specifications

VersaPower Connectors

Reference Information

Packaging: Embossed tape on reel
Designed in: Millimeters
RoHS: Yes
Halogen Free: Low halogen

Electrical

Voltage (max.): 50V
Current (max.):
- Signal contact—0.3A
- Power tail and nail—15.0A

Contact Resistance (max.):
- Signal contact—30 milliohms
- Power contact—15 milliohms

Insulation Resistance (min.): 100 Megohms
Dielectric Withstanding Voltage: 250V AC

Mechanical

Pitch: 0.30mm
Mated Height: 0.60mm
Width: 1.90mm
Length: [{(Circuit/2)-1} x pitch] + 5.30mm
Circuit Size: 20 to 80 pins
Durability (max.): 30 cycles
Alignment: 0.37mm (pitch) and 0.31mm (span)
Insertion Force (max.):
- Initial—32N
- After 30 times—80N

Withdrawal Force (min.):
- Initial—6N
- After 30 times—15N

Physical

Housing: LCP, UL 94 V-0, black
Contact: Copper alloy
Plating:
- Contact area—gold
- Solder tail area—gold
- Underplating—nickel

Temperature Rise (max.): 30°C
Operating Temperatures: -40 to +85°C