

## Generation 50

# MINIATURIZED AUTOMOTIVE CONNECTOR SYSTEM

- **1.8mm robust and reliable connector system for space-constrained signal interfaces**

The Generation 50 supports customers designing, planning, or producing products where components that weigh less - and take up less space - can provide an advantage. The robust, technology of the Generation 50 includes anti-stubbing terminal beam geometry, that helps eliminate the risk of terminal push out, and allows for excellent insertion and stress distribution.

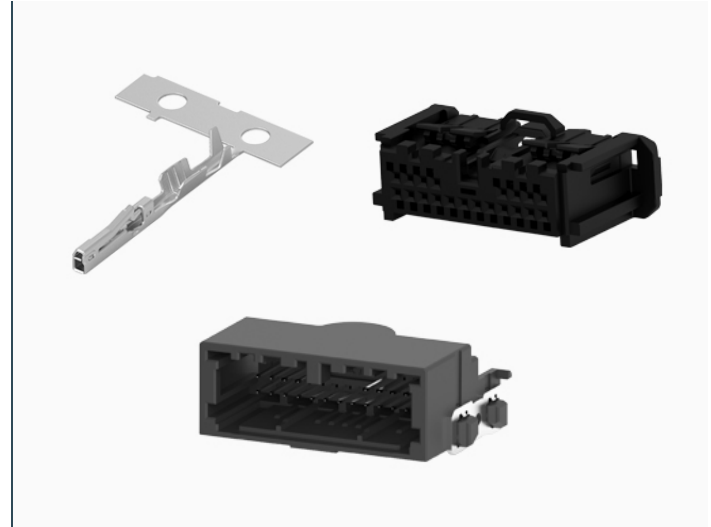
TE Connectivity's Generation 50 miniaturized connector system offers clean body and locking lance terminal designs incorporating to support automotive-robust miniaturized connectivity, supporting wire sizes from 0.13mm<sup>2</sup> to 0.35mm<sup>2</sup> as well as PCB retention forces of up to 80N, while meeting USCAR ergonomic requirements.

### APPLICATIONS

- Head lamps /indicators
- Steering wheel controls
- Front and rear cameras
- Switches/sensors/roof control/antenna module
- Wire harness/electrical systems
- HVAC
- Audio modules
- Battery applications (battery management systems)

### BENEFITS

- Enables smaller PCBs & enclosures and faster PCB processing
- Small header footprint and connector form factor
- Strong header retention on PCB
- Protects header pins from damage during mating
- Feedback that connector is fully mated on the assembly line
- Additional level of mating assurance
- Assists with wire routing and wire strain relief
- Reduces installer fatigue
- Reliable performance demonstrated
- Small wire enables reduced wire harness size, weight and cost
- Covers broad range of application needs
- Supply power and signal to devices with one connector
- Prevents risk of terminal push-out (TPO) during mating
- Reduced tangling during wire harness processing



### PRODUCT FEATURES

- SMT (Surface Mount Technology) Headers
- 1.8mm pint-to-pin pitch
- Header to PCB mounting clips
- Robust anti-scooping features
- Loud audible click during mating
- Connector Position Assurance (CPA) available
- Provision for Wire Dress Covers
- Ergo design - USCAR-25 compliant (2, 4 and 6P plugs)
- USCAR-2 and USCAR-21 qualified
- Wire size range: 0.13mm<sup>2</sup> to 0.35mm<sup>2</sup> thin wall
- Circuit count from 4 to 32 positions
- Hybrid configurations possible with 1.2mm circuits
- Anti-stubbing terminal beam geometry
- Clean body terminal system

### LEARN MORE

- [Generation 50 Connector System Product Page](#)
- [Automotive Miniature Product Group Page](#)
- [Automotive Miniature White Paper](#)
- [Battery White Paper](#)
- [Miniature Portfolio \(US\)](#)
- [Miniature Portfolio \(EMEA\)](#)
- [Signal and Power Brochure](#)