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## Introducing TE Connectivity (TE) Generation 50 Portfolio

The TE Generation 50 portfolio is designed to satisfy the proposed USCAR-2 environmental and mechanical requirements for a 0.50 mm terminal/connector system.

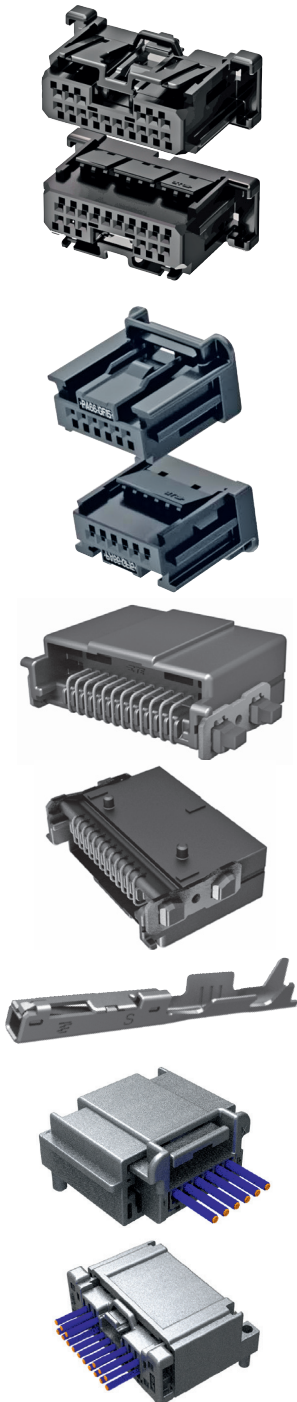
The product offers weight and packaging advantages over existing 0.64 mm systems and supports Temperature Class T2, Vibration Class V1 and Sealing Class S1.



Introduction

**BENEFITS**

- Meets tight packaging requirements
- Package more circuits in the same space
- Weight reduction
- Damage resistant SMT design



**■ APPLICATIONS**

- Door locks
- Steering wheel switches
- Column harness's
- Cameras
- Sensors
- Unsealed control units

**■ MECHANICAL**

- Mechanical performance per PRD
- Temperature class T2 (-40°C to + 100°C) per USCAR-2
- Vibration class V1 per USCAR-2
- Sealing class S1 per USCAR-2
- Shall accept wire range from 7 strand 0.13 sqmm ultra-thin wall up to seven strand 0.35 sqmm thin wall (ISO 6722)
- Terminal insertion force equal to or less than 15N
- Primary latch retention of 15N
- Primary and secondary latch retention of 35N after temp/humidity and 40N after moisture conditioning.
- 1.8 mm centerline spacing

**■ ELECTRICAL**

- Satisfy EWCAP (USCAR-2 proposed) promoted voltage drop and dry circuit requirements of 25 milliohms max.
- IR > 100 MΩ at 500 VDC
- 0.13 sqmm – 2 amps single terminal free-air
- 0.35 sqmm – 5 amps single terminal free-air

**■ MATERIALS**

- Female terminal: Tin plated CuNiSi (same base metal used with Generation Y and GET)
- Plug housings: 15% glass-filled nylon
- Header housings: PCT
- Header blades: Tin plated brass
- Header solder clips: Tin plated brass

**■ STANDARDS AND SPECIFICATIONS**

- USCAR-21
- USCAR-2

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**■ PRODUCT OFFERING**

- Single row 6 circuit right angle surface mount PCB header – 4 polarization options
- Single row 6 circuit plug – 4 polarization options
- Dual row 16 circuit plug – 4 polarization options
- Dual row 28 circuit right angle surface mount PCB header – 4 polarization options
- Dual row 28 circuit plug – 4 polarization options
- Female terminal 2098583-1, -2, and -4

**■ PRODUCT DIMENSIONS**

- 6 position plug 2203130-1 thru -4  
16.8 wide x 10.0 high x 15.2 deep
- 16 position plug 2203085-1 thru -3  
28.6 wide x 10.5 high x 15.4 deep
- 28 position plug 2203367-1 thru-4  
39.4 wide x 10.5 high x 15.2 deep
- 6 position header 2203132-1 thru -4  
25.2 wide x 10.9 high x 20.7 deep
- 16 position header 2203091-1 thru -4  
32.4 wide x 12.4 high x 20.7 deep
- 28 position header 2203369-1 thru -4  
43.2 wide x 12.4 high x 20.7 deep



AUTOMOTIVE

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**CONTACT**

**United States**

Harrisburg, PA

Phone: +1-717-564-0100

Fax: +1-717-986-7575

Product Information Center:

Phone: +1-800-522-6752

Fax: +1-717-986-7575