



TE Connectivity's (TE) automotive connectors are the standard of the industry and they are now available with all of the benefits that you rely on from the Specialist in electronic components distribution. TTI offers more than just a wide and deep inventory of available-to-ship TE connectors, you can also include them in TTI's AIM supply chain programs for just-in-time delivery to keep your production lines in high gear.

## Reach your local sales team at 1.800.CALL.TTI



# Shift Your Supply Chain Into High Gear

With connectors for virtually every transportation need from the ignition system to the exhaust, infotainment to engine management, TTI carries the TE automotive connector to fit your application. Certified to industry standards and built for ease of production, these connectors are engineered specifically for the rigors of automotive applications.

AUTHORIZED DISTRIBUTOR	POWERTRAIN	SAFETY/SECURITY	CONVENIENCE	<b>DRIVE INFORMATION</b>	BODY & CHASIS	AERO/DEFENSE	APPLIANCE	<b>CONSUMER DEVICES</b>	DATA COMMUNICATIONS	D&D	ENERGY	INDUSTRIAL	MEDICAL
	TRANSPORTATION					OTHER MARKETS							
TH 025 Connector Series		•	•	•								٠	
0.50 Connection Systems		•	•	•								٠	
MQS Interconnection System	•	•	٠	٠	٠	•	٠	٠	•		•	٠	•
Timer Interconnection System	•	٠	٠	٠	٠		٠				•	٠	
MULTILOCK Connector System	•	•	•	•	٠		٠			٠		•	

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# **TH 025 Connector Series**

### **Product Overview**

- · Robust Connection and Performance while Securing High-Density in Limited Spaces
- 2.2mm Pitch Compared to Standard 2.54mm
- Low Insertion Force 0.64mm Locking Lance Terminal System
- · Low Connector Mating Force, Offering High-Density with Easy Handling
- Unsealed Connections
- Wire-to-Wire, Wire-to-Board
- Tin and Gold Plating Options
- Thru-hole (TH) and Surface Mount (SMT) PCB Headers Available

#### **Contact System**

- Locking Lance Design Receptacle and Tab Terminals
- One Piece Design for Unsealed Systems 0.63 X 0.63mm
- Contact Design to Reduce Fretting
- Reduced Insertion Force (2.2N), Contact Retention Force 100N
- 5 Amp Max Load @ 80° C
- Terminals with Locking Lance
- Available in Sn & Au (Receptacle Only)
- Solutions Available for Wire Size 0.13mm<sup>2</sup> 0.50mm<sup>2</sup>
- Primary and Secondary Locking Capability
- · Base Material CuNiSi for Receptacle, and Brass for Tab
- Temperature Range -40° C to +105° C

- 4 40P System with Low Mating Force. No Mating Aid Required
- · Mounting Rails Available on Tab Housings
- Small Pitch (2.2 X 3.0mm), 1st Step Towards Miniaturization
- · Four Mechanical Codings Available Plus Neutral and Color
- Reduced Mating Force Max 60N (70N for 40P)
- · Primary and Secondary Locking Capability
- All Products are Double Row with the Exception of 4P
- · Headers Available in 90°, 180° and TH, SMT Configurations
- Headers Compatible with Wave and Leadfree Reflow Processes
- Board Locks Enable PCB to be Soldered Upside Down



## 0.50 Connection Systems

### **Product Overview**

- · Miniaturization while Maintaining Automotive-Grade Robustness
- 1.8mm Centerline Pitch
- 0.13 to 0.35mm<sup>2</sup> Thin Wall Wires
- Up to 130° C for High-Temperature Applications
- Up to 5.5A Current Carrying Capacity @ 80° C
- · Globally Recognized and Used Products
- Products Qualified to USCAR2, GMW3191 and LV-214
- Unsealed and Sealed Low-Voltage, Low-Signal Applications, and Blackbox Applications (Connections Inside Modules)

#### **Contact System**

- · Box with Polarization and Secondary Locking Feature
- Locking Lance and Clean Body Versions
- Protected Locking Lance
- Sealed and Unsealed Versions
- Wire Size Range: 0.13mm<sup>2</sup> to 0.35 mm<sup>2</sup> Thin Wall

- · Sealed and Unsealed Wire-to-Board Connectors
  - Through Hole (TH), Surface Mount (SMT) and Pressfit Headers
  - SMT Headers with High PCB Retention Forces (80N in Directions Perpendicular to Mating)
- Robust Anti-Stubbing Features
- · Polarization Feature and Several Key Coding
- · Locking Mechanism with and without Connector Position Assurance (CPA)
- Up to 30 position USCAR2 Compliant Hand Mate Connectors
- · Hybrid Connectors with MCON 1.2 Terminals



# **MQS Interconnection System**

### **Product Overview**

- · Four Points of Contact for Redundancy
- Up to 140° C Max for High-Temperature Applications (Using Gold Contacts)
- Up to 7.5A Current Carrying Capacity @ 80° C (See Derating in 108-18030 Specifications)
- Sealed and Unsealed (Sealed Using Mat or Individual Wire Seals)
- · Unsealed Have Detent (In Smaller Sizes) as well as Latched Plugs for Positive Engagement
- Large Global Recognition and Use
- · Mature Family with Widespread History of Performance
- Large Tooled Product Base
- Highest Performance of Any 0.64 System

#### **Contact System**

- High-Performance Copper Alloy
- · Redundant Contact Point Technology for Higher Reliability
- High Vibration Level Supported
- · Overstress Protection of the Contact Springs
- · Box with Polarization and Secondary Locking Feature
- Protected Locking Lance
- Sealed and Unsealed Version
- -40° C up to 150° C Temperature Range

- · High-Vibration Level Supported
- · Designed for Reliability and Reduced Manufacturing and Service Cost
- · Sealed and Unsealed as Wire-to-Wire and/or Wire-to-Board Version
- Provide Polarization Feature and Several Key Coding
- Provide Ergonomic Assembly and Safe Installation
- Locking Mechanism with and without Connector Position Assurance (CPA)
- · Mating Aid for High Pin-Count Connectors to Ensure Low-Mating Forces
- -40° C up to 150° C Temperature Range

# **Timer Interconnection System**

### **Product Overview**

- · Available for Sealed or Unsealed Wire-to-Wire, Wire-to-Board and Wire-to-Device Applications
- Designed to Meet the Need for a Lower Force Contact System to Replace FASTON Terminals Where Multiple Position Connectors were Required
- The following Contact Types are Available in Various Sealed and Unsealed Crimp Versions
  - Micro Timer 2 & 3 (MT2 / MT3)
  - Junior Power Timer (JPT)
  - Standard Power Timer (SPT)
  - Maxi Power Timer (MaPT)

### **Timer Contact is Unique**

- The Open Front End Geometry of the Female Contact Allows the Mating of Tabs in an Oblique Condition
- · Maintains Stable Contact Geometry
- Allows the Housings to be Mated in a Hinged Fashion
- · Higher Pin Counts can be Mated at a Reduced Force

### **Contact System**

- · Power Timer Contacts Have a Stainless Steel Jacket Which:
  - Supports the Contact for Superior Stress Relaxation at Elevated Temperatures and Damage Due to Abusive Mating
  - Provides Dual Locking in Housing
  - Provides Higher Contact Retention in Housing
  - Allows for Secondary Lock Possibility
  - Maintains Stable Normal Force Over Time
- · -40° C up to 150° C Temperature Rating

- Connectors Available as Receptacle and Tab Housings for Free-Hanging Coupling in Wiring Harnesses
- · Also Available for Wire-to-Board and Wire-to-Device Applications
- · Sealed and Unsealed Versions
- Hybrid Housings for Signal/Power up to 121 Positions Possible
- Provide Polarization Feature with Key/Color Coding
- Pivot Lever or Slide Cam Method Employed (Sequential Insertion Distributed Along an Angled Path)



# **MULTILOCK Connector System**

### **Product Overview**

- · Small Packaging Options Available with 025 as the Smallest Using 0.64mm Terminals
- · Provides Dual Locking on the Housing and Terminal Lances
- · Additional Secondary Locking is Performed by Hinge and Side Lock
- Contact Points Protected by Sealed Box Structure Design

#### **Contact System**

- · Both Clean Body and Lance Terminal Options Available
- Pre and Post Plating, Sn or Au for Most Series
- · Base Material of Receptacle is Copper Alloy, Tab Brass
- 0.64, 1.0, 1.8, and 2.3mm Terminal Options
- Current Range from 3-15 Amps
- Option for High-Current Applications

- 025, 040, 070, 090 Series
- Variety Line-Up with Pin Count Ranging from 2-72
- Vertical, Horizontal, and SMT Styles
- High-Temperature Material Available for Select Series
- High-Density ECU Connectors
- Pin Count up to 200
- Downsized Terminal Available
- · Low-Mating Force with 025 Series
- 70N Max with Lever Assist
- Vertical and Horizontal Styles
- High-Temperature Material Available
- · Sealed and Unsealed Options Available



# Why Buy from the Specialist in Electronic Component Distribution?

Founded in 1971, TTI has steadily grown to become the world's leading interconnect, passive, electromechanical and discrete component distributor in the industry. The company was founded on the premise that passive component purchasing could be made more efficient by offering product specialization, customer-driven service, and proprietary supply chain solutions.



## Knowledgeable Product Experts

Specialization allows TTI product managers to provide much better product insight to support your manufacturing from design through production. TTI Specialists' commitment to our customers is key to our continued success.



### Broader and Deeper Inventories

TTI maintains extensive component inventories, stocking more than 500,000 part numbers in North America and over 850,000 globally – that's more interconnect, passive, electromechanical and discrete inventory available than from any other source.



## AIM - Advanced Inventory Management Platform

TTI's proprietary supply chain system is specifically designed for managing IP&E products and partnerships with premier manufacturers. This allows us to provide the BOM coverage necessary to deploy comprehensive solutions that reduce total cost of ownership and mitigate line down risk.

## **Quality and Reliability**

TTI is the first distributor to have all global warehouse locations ISO registered and currently are certified to ISO 9001 with AS9100C and ISO 14001 in North America, ISO 9001, EN 9100, ISO 14001 and EN 9120 in TTI Europe and ISO 9001 in TTI Asia.

Year after year, customers rate our inventory availability, on-time delivery and accuracy among the very best in the industry – call your local TTI Specialists at 1.800.CALL.TTI and discover why.







