# PEM<sup>®</sup> BUSBAR FASTENERS FOR AUTOMOTIVE ELECTRONICS

World-class automotive electrical systems require reliable and secure performance from their internal components. PEM® busbar fastening solutions are designed, developed and proven to perform across many busbar-to-busbar applications.

# Safety Critical Performance. Certified Clean. Application Tested.

## Reliable Clamp Load and No Galvanic Corrosion

- Reliable clamp load to all joints throughout busbar and busbar-to-busbar connections
- Plastic integrity is uncompromised by the applied load
- Variety of material/plating combinations available

## Technical Cleanliness with PEM® Clean Lab

- Per customer specifications, ISO 16232, VDA 19 standards
- Processing: extraction, filtration, drying/weighing
- Clean Analysis: fully automatic, high sampling rate, precise particle detection

## Application Engineering and Certified Testing

- Custom design and product development
- Application-specific product testing, sampling
- Quality control technical inspections for all PEM<sup>®</sup> parts

# PEM<sup>®</sup> Busbar Fasteners

## THFE<sup>™</sup> Heavy Duty Studs

For installation into busbars as thin as .031"/0.8 mm

- Clinch design for high-strength, permanent installation
- Ideal for installation into copper, aluminum, steel
- Enlarged head diameter/thickness provides enhanced contact area

## Download Data Sheet

The use of PEM<sup>®</sup> THFE<sup>™</sup> Heavy Duty Studs and Captivated Spinning Nuts in this busbar application provides many benefits:

- Reduced electric arcing potential
- Reduced fire potential
- Minimal gap
- Better contact area
- Higher current flow





B<sup>™</sup> Self-Clinching Blind Nuts Download Product Bulletin



Captivated Spinning Nuts Download Product Bulletin



S<sup>™</sup> Self-Clinching Nuts Download Product Bulletin



Reelfast<sup>®</sup> SMTSO<sup>™</sup> Standoffs <u>Download Product Bulletin</u>



SI® Molded-In Inserts for Plastics Learn More

PEM<sup>®</sup> Grooved Self-Clinching Pin for RADSOK<sup>®</sup> Connectors



# SI® Threaded Inserts — Proven Performance in Plastics for Auto Electronics

## **Installation Methods**

SI® inserts are manufactured for all common installation methods:

## Ultrasonic

Great for: Thermoplastics High overall performance VIDEO: <u>Ultrasonic Animation</u>

## Heat Staking

Great for: Thermoplastics High overall performance with low installation cost VIDEO: <u>Heat Staking Animation</u>

#### Mold-In

Great for: Thermosets & Thermoplastics Best pull-out and torque performance VIDEO: <u>Molded-In Animation</u>

#### Press-In

Great for: Thermosets Easy, simple press installation at lowest cost VIDEO: **Press-In Animation** 

## **Materials and Finishes**

## Brass

- Industry standard
- Lowest cost

#### Stainless Steel & Aluminum

- SI<sup>®</sup> is the industry leader for stainless steel and aluminum inserts
- Only insert manufacturer to offer aluminum as a catalog standard (lead-free and 70% lighter than brass)
- Stainless Steel offers better protection from certain types of corrosive agents
- Smart alternatives to leaded brass that support sustainable manufacturing

## Get PEM® and SI® Support Anytime, Anywhere

No matter where you are in the world, our value-add services are there. With locations throughout North America, Asia and Europe you'll get complete global support at the local level.

#### **Application Engineering Services**

Application Review

• Teardown Services

- Custom Design/Product Development
- 3D Models

#### Technical Lab Services

- Product Testing worldwide
- State-of-the-art Clean Lab capabilities

#### SI<sup>®</sup> Prototype Kit

- 1,000+ ultrasonic, mold-in, press-in inserts
- Various types/sizes for your specific design requirements



# **GLOBAL CONTACT INFORMATION**

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