



## microPEM® TackSert®: Exceeds Retention Force Requirements and Cuts Installation Time in Half

Switching from a thread forming screw to a TackSert® fastening solution not only met the customer's stringent requirements for a new camera system but delivered improved performance.

### OVERVIEW

Customer:  
**Automotive  
Supplier**

Application:  
**Multi-Camera  
System**

Solution:  
**TackSert® Fastener**



### CHALLENGE

#### Stringent Requirements for New Camera System

- Thread forming screw used in current generation of cameras
- New camera size significantly smaller
- New clamp force and cleanliness requirements
- Increased production volume required customer to reduce cost and assembly time
- Concern over PCB damage during installation



### SOLUTION

#### microPEM® TackSert

- Alternative to micro screws, eliminating cost of threaded hardware
- Simple, clean press-in installation – no heat or ultrasonics
- Top sheet can be any material
- Low profile head fits where screws can't
- Non-removal ensures Tamper evident applications



### RESULTS

#### Replacing M2 screw with TackSert® far exceeded retention force requirement By 40%

- 50% reduction - installation time (1.5s vs. 3s)
- 30% reduction of keep-out space on PCB (2.8mm vs. 4mm)
- 60% reduction of head height (0.6mm vs. 1.5mm)
- Non-removal of PCB through permanent TackSert® fixation
- Met cleanliness requirements by eliminating lubricant coating (needed for old M2 screw)

Exceeded  
Retention Force  
Requirements By

**40%**