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

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)

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