

micro **PEM**TM **FASTENERS**

Capabilities and Design Guide



- Precision/quality manufacturing
- Easy, low cost installation
- Excellent performance
- Can be installed with automated equipment
- RoHS compliant
- Design assistance provided

Ideal for today's compact electronics

- Laptop/notebook/tablet computers
 - Cell phones
- Home electronic games
 - Hand-held devices

Fastener types

- Micro tack pins
- Micro self-clinching locating pins
 - Micro spacers/standoffs
 - Micro screws
 - Micro inserts
- Other designs as required

Challenging Designs Call for Extreme Measures!

micro PEM™ FASTENER CAPABILITY GUIDELINES



Micro tack pins

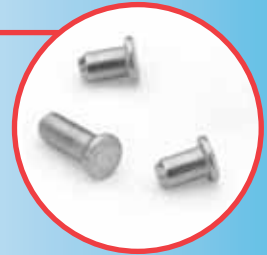
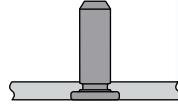
Designed for sheet-to-sheet attachment.

- Replaces screws, welds, and adhesives
- Attaches top sheets as thin as 0.08 mm / .003"
- Installs into bottom sheets as hard as HRB 88, including stainless steel
- Tapered and interference fit minimize hole tolerance issues

Micro self-clinching locating pins

Install into thin sheets for locating / positioning applications.

- Smallest Diameter - 1 mm/.040"
- Shortest length - 2 mm/.080"
- Minimum sheet thickness - 0.5 mm/.020"
- Maximum sheet hardness - HRB 90
- Fastener material - steel, stainless steel and aluminum



Micro spacers/standoffs

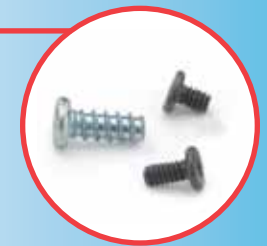
Install into thin sheets for spacing applications.

- Self-clinching or surface mount installation.
- Smallest thread size - M1.0/#0-80
- Shortest length - 1 mm/.040"
- Minimum sheet thickness - 0.3 mm/.012"
- Maximum sheet hardness - HRB 88
- Fastener material - steel, stainless steel and aluminum



Micro screws

- Smallest thread size - M1
- Shortest length - 2 mm/.080"
- Fastener material - steel, stainless steel and aluminum
- Driver types - internal lobed / Phillips / Mortorq® Super Drive System
- Head styles - flat head / pan head / Mortorq® Super Miniature Wafer Head
- Special features - locking patch if required
- Platings - black oxide and zinc



Micro inserts

Strong metal threads in plastics.

- Smallest thread size - M1
- Fastener material - brass / stainless steel
- Styles - ultrasonic, molded-in and press-in

To find the right fastener for your needs please contact your nearest PEM® representative or our tech support groups at techsupport@pemnet.com

PennEngineering®



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