

The SOLIDWEDGE™ is a breakthrough technology that allows conduction cooled modules to operate at higher thermal loads in higher temperature environments.

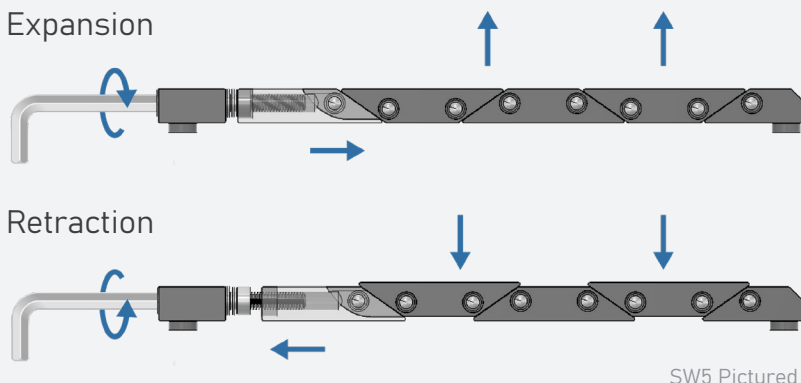
OPTIMIZED FOR VITA 48.2 AND CPCI



US PATENT
8,456,846

POSITIVE RETRACTION

Adjacent wedge segments are connected to prevent a stuck wedge lock. Turning the drive screw counterclockwise retracts the threaded drive wedge, pulling each of the connected segments down to their relaxed position.



THERMAL RESISTANCE

0.08 °C/W Resistance per Card Edge

FEATURES

- 1800 lb Clamping Force
- Mass: 98 g
- Helicoil Insert
- Belleville Spring Washers
- #10 Drive Screw
- Zero Insertion Force
- Low Profile Design
- Self-Retracting Segments
- Superior Plating Endurance
- Optimized for VITA Specifications
- Models Available for Download
- Torque to 15-30 in-lbs

MATERIALS

Active Wedge Segments: 6061-T6511

Front Mounting Block: 7075-T7351

Screws, Nuts, Washers:
300 Series Stainless Steel
(passivated per AMS - 2700)

Helicoil Wire Insert: Nitronic 60

3D MODEL:

<https://a360.co/47Aku9R>

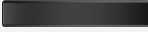



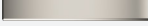
The SOLIDWEDGE™ design provides three times the thermal contact area of conventional wedge locks. The design also features a larger screw size, which creates higher contact forces between the heat frame and cold wall surfaces, significantly improving thermal performance.

The interconnected links of the SOLIDWEDGE™ feature positive retraction of all segments without the use of springs or other mechanisms.

PART NUMBER BUILDER

Required

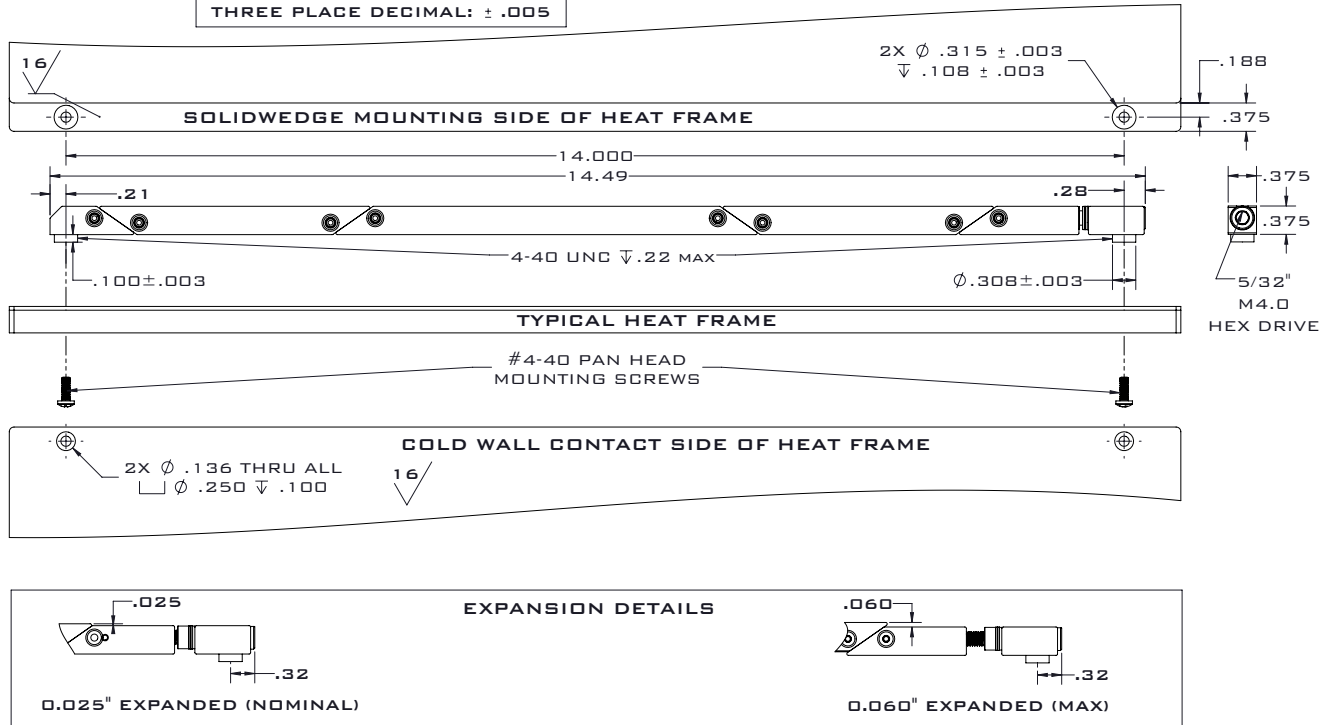
Additional Specifications

| | | | | | | | | |
|---|---------------------------------------|--|------------------|------------|-----------|------------------------------|---|---|
| SW5 | 140 | 375 | 375 | XXX | XX | YY | | |
| Wedge: | Spacing: 14" MOUNTING HOLE SPACING | Height: 0.375" | Width: 0.375" | Hex: | Finish: | 1 [NL] - NYLOK LOCK PATCH | 2 | 3 |
| SW - SOLIDWEDGE 5 - ACTIVE SEGMENTS | | 5/32" HEX KEY - [532] M4 HEX KEY - [M4] | | | | | | |
|  BLACK ANODIZE PER MIL-A-8625, TYPE II, CLASS 2 [BA]  HARD BLACK ANODIZE PER MIL-A-8625, TYPE III, CLASS 2 [BH]  CHEMICAL FILM CLEAR [CC]  CHEMICAL FILM GOLD [CG]  ELECTROLESS NICKEL [EN] | | See last page for more plating info | | | | | | |

RECOMMENDED PART NUMBER: SW5-140-375-375-532-BA

MOUNTING DETAILS

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TWO PLACE DECIMAL: ± .01
THREE PLACE DECIMAL: ± .005



Standard material specs for WaveTherm's SOLIDWEDGE™, injector/ejectors, and OpenCOTS products.

ASSEMBLY HARDWARE



300 SERIES STAINLESS STEEL

| Compliance | Specification | Use Case |
|------------|----------------|--|
| ✓ DFARS | Passivated per | Standard material for screws, nuts, washers, and SOLIDWEDGE™ straps in WaveTherm product assemblies. |
| ✓ RoHS | AMS-2700 | |
| ✓ REACH | | |

ALUMINUM PLATING



BLACK ANODIZED - BA

| Compliance | Specification | Properties and Use Case |
|------------|---------------|--|
| ✓ RoHS | MIL-A-8625 | Provides reliable corrosion resistance and durability. Ideal for use in demanding applications requiring high insertion/extraction counts. |
| ✓ REACH | Type II | |
| | Class 2 | |



BLACK ANODIZED HARDENED - BH

| Compliance | Specification | Properties and Use Case |
|------------|---------------|---|
| ✓ RoHS | MIL-A-8625 | Provides superior corrosion resistance and high durability. Ideal for use in harsh and rugged environments with high insertion/extraction counts. |
| ✓ REACH | Type III | |
| | Class 2 | |



CHEMICAL FILM CLEAR - CC

| Compliance | Specification | Properties and Use Case |
|------------|-------------------|---|
| ✓ RoHS | MIL-DTL-5541 | Provides good corrosion resistance and electrical conductivity with lower durability. Not ideal for high insertion/extraction counts. |
| ✓ REACH | Type II | |
| | Class 1A Clear | |



CHEMICAL FILM GOLD - CG

| Compliance | Specification | Properties and Use Case |
|------------|------------------|---|
| ✗ RoHS | MIL-DTL-5541 | Provides good electrical conductivity with lower durability. Not suited for high insertion/extraction counts. |
| ✗ REACH | Type I | |
| | Class 1A Gold | |



ELECTROLESS NICKEL - EN

| Compliance | Specification | Properties and Use Case |
|------------|---------------|--|
| ✓ RoHS | MIL-C-26074 | Provides excellent thermal performance and excellent electrical conductivity. Ideal for high-performance thermal management. |
| ✓ REACH | Class 4 | |
| | Grade B | |

Images for demonstration only

*varies based on plating vendor's certificates of conformance