

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

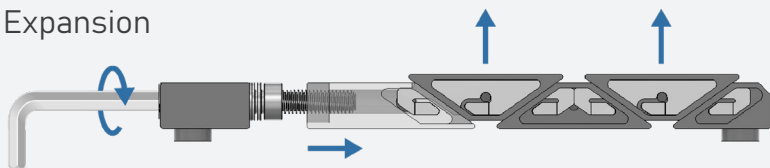


**US PATENT**  
**8,456,846**

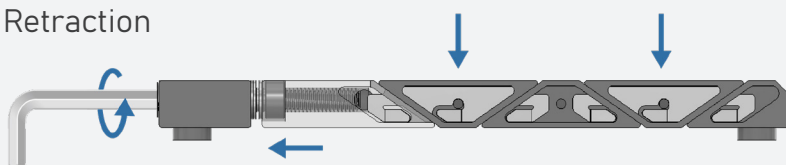
## POSITIVE RETRACTION

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.

### Expansion



### Retraction



SW5 Pictured

## THERMAL RESISTANCE

0.08 °C/W Resistance per Card Edge

## FEATURES

- 1800 lb Clamping Force
- Mass: 28.6 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/3wqiaggp>

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

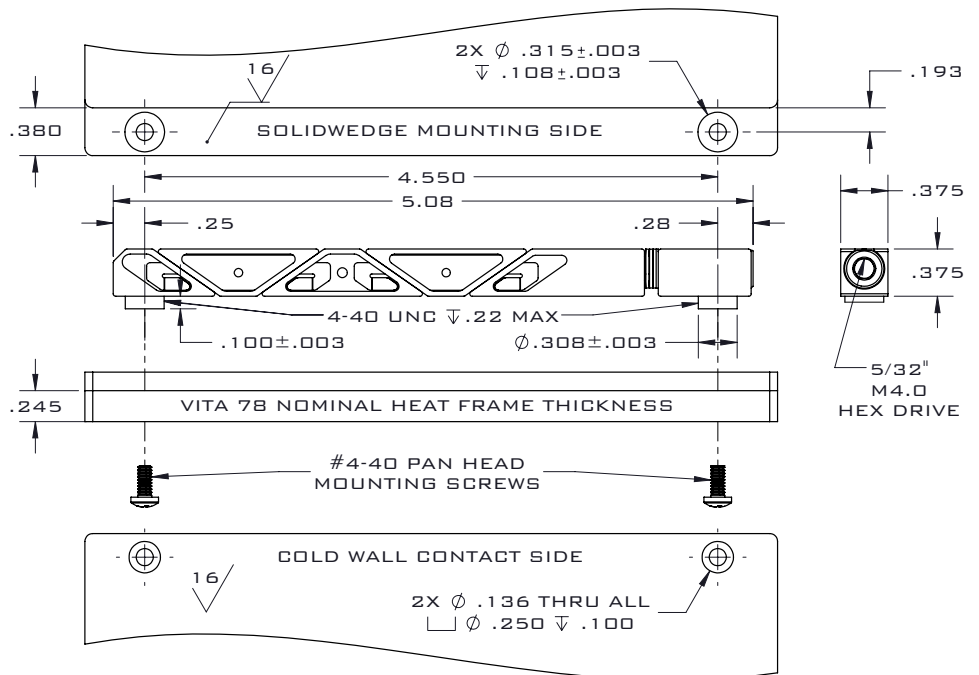
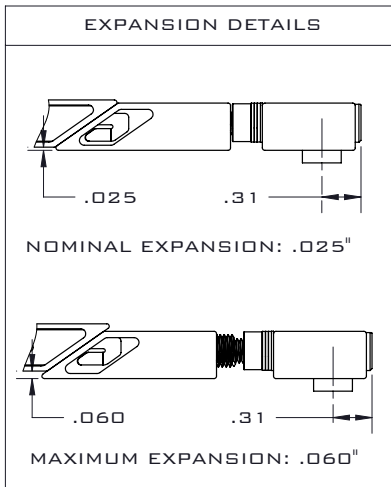
Additional Specifications

|  |   |  |                  |            |                         |           |   |   |
|--|---|--|------------------|------------|-------------------------|-----------|---|---|
| <b>SW5</b>   | <b>455</b>                              | <b>375</b>                                 | <b>375</b>       | <b>XXX</b> | <b>XX</b>               | <b>YY</b> |   |   |
| Wedge:   | Spacing:<br>4.55" MOUNTING HOLE SPACING | Height:<br>0.375"                          | Width:<br>0.375" | Hex:       | Finish:                 | 1         | 2 | 3 |
| SW - SOLIDWEDGE<br>5 - ACTIVE SEGMENTS   |   | 5/32" HEX KEY - [532]<br>M4 HEX KEY - [M4] |                  |            | [NL] - NYLOK LOCK PATCH |           |   |   |
| <ul style="list-style-type: none"> <li>BLACK ANODIZE PER MIL-A-8625, TYPE II, CLASS 2 [BA]</li> <li>HARD BLACK ANODIZE PER MIL-A-8625, TYPE III, CLASS 2 [BH]</li> <li>CHEMICAL FILM CLEAR [CC]</li> <li>CHEMICAL FILM GOLD [CG]</li> <li>ELECTROLESS NICKEL [EN]</li> </ul> |   | See last page for more plating info        |                  |            |                         |           |   |   |

RECOMMENDED PART NUMBER: SW5-455-375-375-532-BA

## MOUNTING DETAILS

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES.  
TOLERANCES:  
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<br>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<br>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       |  |

\*varies based on plating vendor's certificates of conformance