

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

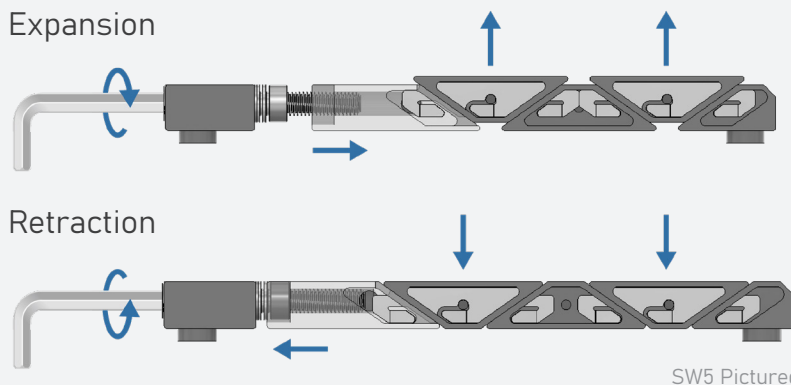
## OPTIMIZED FOR VITA 48.2 AND CPCI



**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

0.11 °C/W Resistance per Card Edge

## FEATURES

- 1000 lb Clamping Force
- Mass: 18.4 g
- Helicoil Insert
- #6 Drive Screw
- Zero Insertion Force
- Low Profile Design
- Self-Retracting Segments
- Superior Plating Endurance
- Optimized for VITA Specifications
- Models Available for Download
- Torque to 6-10 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/3FU0nVG>



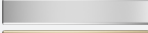

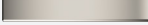
The SOLIDWEDGE™ design provides three times the thermal contact area of conventional wedge locks. The design also features a larger screw size, which creates higher contact forces between the heat frame and cold wall surfaces, significantly improving thermal performance.

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

## PART NUMBER BUILDER

Required

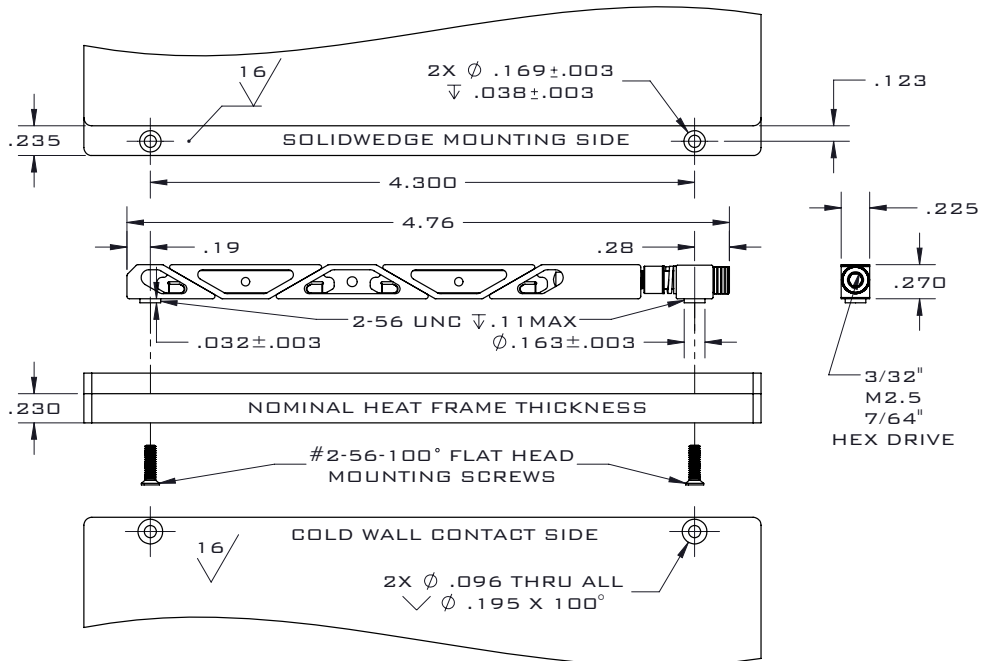
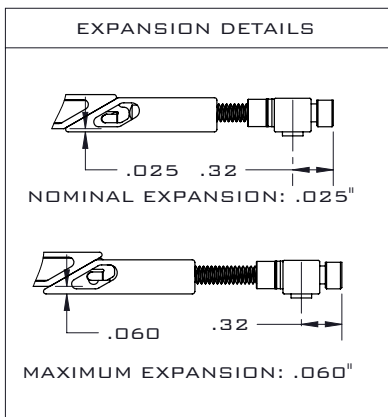
Additional Specifications

<b>SW5</b>	<b>43</b>	<b>270</b>	<b>225</b>	<b>XXX</b>	<b>XX</b>	<b>30D</b>	<b>YY</b>	
Wedge:	Spacing: 4.3" MOUNTING HOLE SPACING	Height: 0.270"	Width: 0.225"	Hex:	Finish:	1 30° WEDGE SEGMENTS	2	3
SW - SOLIDWEDGE 5 - ACTIVE SEGMENTS		3/32" HEX KEY - [332] M2.5 HEX KEY - [M25] 7/64" HEX KEY - [764]			[BV] - BELLEVILLE WASHERS [NL] - NYLOK LOCK PATCH			
 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: SW5-43-270-225-332-BA-30D-BV

## 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 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	
	or* 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	
	or* AMS-C-26074 Class 4 Grade B	

Images for demonstration only

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