# High Thermal Sawtooth Card Lok



# HIGH PERFORMANCE CARD LOKS TO MEET SWAP-C REQUIREMENTS

nVent SCHROFF's NEW High Thermal Sawtooth Card Lok (HTS) is evolving the traditional card lok to better satisfy industry requirements in aerospace and defense for conduction cooled systems. The HTS series card lok carries advanced thermal and clamping performance compared to similarly sized card locks and comes in 3 profiles (260HTS, 265HTS, and 280HTS). With a cost efficient design, the HTS series meets advanced performance demands for Size, Weight and Power (SWaP) while reducing your total cost of ownership.



# **BEST IN CLASS THERMAL PERFORMANCE**

- Exterior solid bracket design maximizes surface area for heat transfer
- The lower the junction resistance the better the thermal performance



\*Thermal performance is based on application and environment factors \*Performance also depends on finish, Electroless Nickel performs the best

# FEATURES AND BENEFITS

- Reliably secure and cool mission critical electronics in military and defense as well as commercial aerospace applications
- Optimized to meet advanced requirements for Size, Weight and Power at a low cost
- Meeting advanced requirements for heat dissipation and shock and vibration resistance
- Allows for up to 15% increased thermal performance over similarly sized card-locks
  - The HTS series minimizes thermal resistance and allows for heat to flow almost directly from the board to the cold wall
  - features sawtooth profiles providing a continuous and uniform surface along the PCB/heat frame and along the cold wall
- Allows for up to 91% higher clamping force over similarly sized card-locks (280HTS)
- Drop-in replacement for series 260, 265, and 280 nVent SCHROFF card loks

# HIGH CLAMP FORCE PERFORMANCE

• New sawtooth design offers higher clamp force for applications with advanced shock and vibration requirements



\*Performance slightly depends on finish, black anodized performs the best

# **CONDUCTION COOLED ASSEMBLIES (CCA)**



Designed to retain and cool PCBs in rugged, heavy shock, and high vibration environments commonly found in military and defense and commercial aerospace systems

- Order one part for the assembly: kitting including CCA, Card Loks, extractors, thermal pads, gasket and mounting hardware to simplify order management
- High thermal designs
- Downloadable CAD/STEP files based on VITA standards
- · Custom design and build to print
- 3D printed prototypes for fit checks at no cost





#### **EXTRACTORS**

The need to simplify and streamline maintenance has resulted in Two-Level Maintenance requirements within the military and defense industry. Conduction cooled assemblies equipped with HTS Card Loks can be paired with 311 Tolerance Compensating Extractors to ensure effective and efficient maintenance.

Series 311 extractors provide:

- Self-compensation for board tolerances
- · Positive pressure on connectors during Card Lok actuation
- Compliant with VITA 48.4 & 48.2
- Provides 10:1 mechanical advantage
- Other high load extractors according to VITA and IEEE standards available

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