

Calmark offers the Series 225 "Card-Lok" Retainer for cold plate-heat exchanger applications. This is an economical wedge clamp retainer for high efficiency heat transfer from Board Module Assembly to Cold Wall.

FEATURES

- Maximum Reliability – Screw-actuated wedge action locks Board Module Assembly in place
- Maximum Thermal Transfer – Wedge action design provides maximum contact between thermal paths on Board Module Assembly and the heat sinking surface
- Maximum Resistance to Shock & Vibration – Wedge action design locks Board Module Assembly in place to provide maximum resistance to shock and vibration
- Zero Insertion & Extraction Forces – Screw actuation provides zero insertion and extraction force on Board Module Assembly
- Design Flexibility – Special lengths, finishes or other design variations available on request

WEDGES

Material:

Aluminum Alloy
6061-T6 QQ-A-200/8

Finish:

See finish table on
opposite page

SCREW

.093 in or 2.5 mm hex. drive
socket head cap screw

Material:

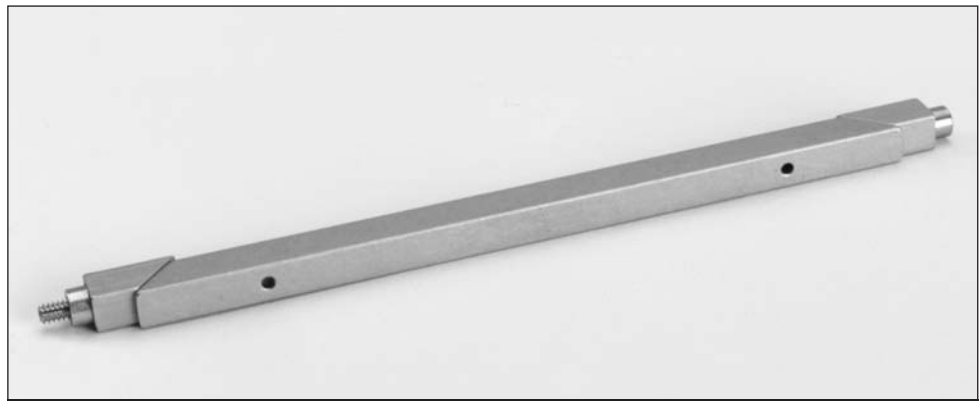
Stainless Steel
QQ-S-763, ASTM A 582

Finish:

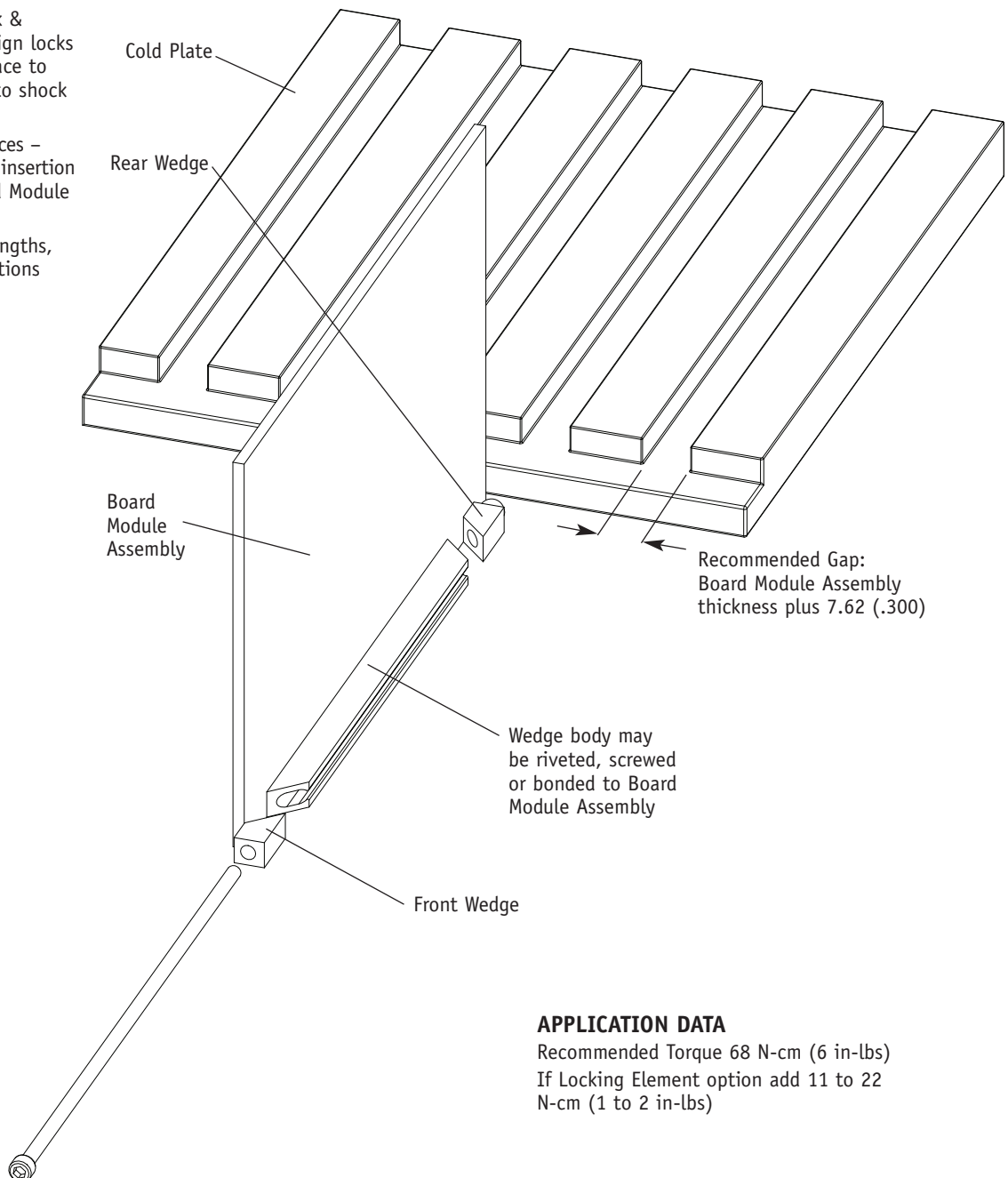
Passivate per MIL-S-5002

WEIGHT

1.34 g/cm (.120 oz/in)



Series 225 - "Card-Lok" Retainer (cold plate)



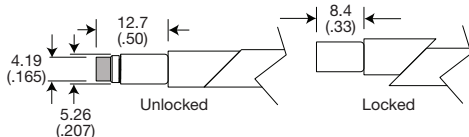
APPLICATION DATA

Recommended Torque 68 N-cm (6 in-lbs)
If Locking Element option add 11 to 22
N-cm (1 to 2 in-lbs)

OPTION PREFIX

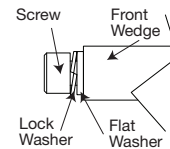
Detail "V"

Provides visual lock indication.



Detail "W"

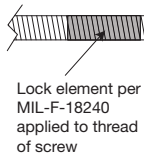
Provides added resistance to loosening from shock and vibration. This option adds 2.5 (.10) to the screw length unless combined with the "R" suffix option, then adds 5.1 (.20) total.



OPTION SUFFIX

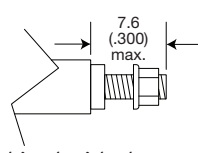
Detail "L"

Provides prevailing torque for resistance to loosening from shock and vibration.



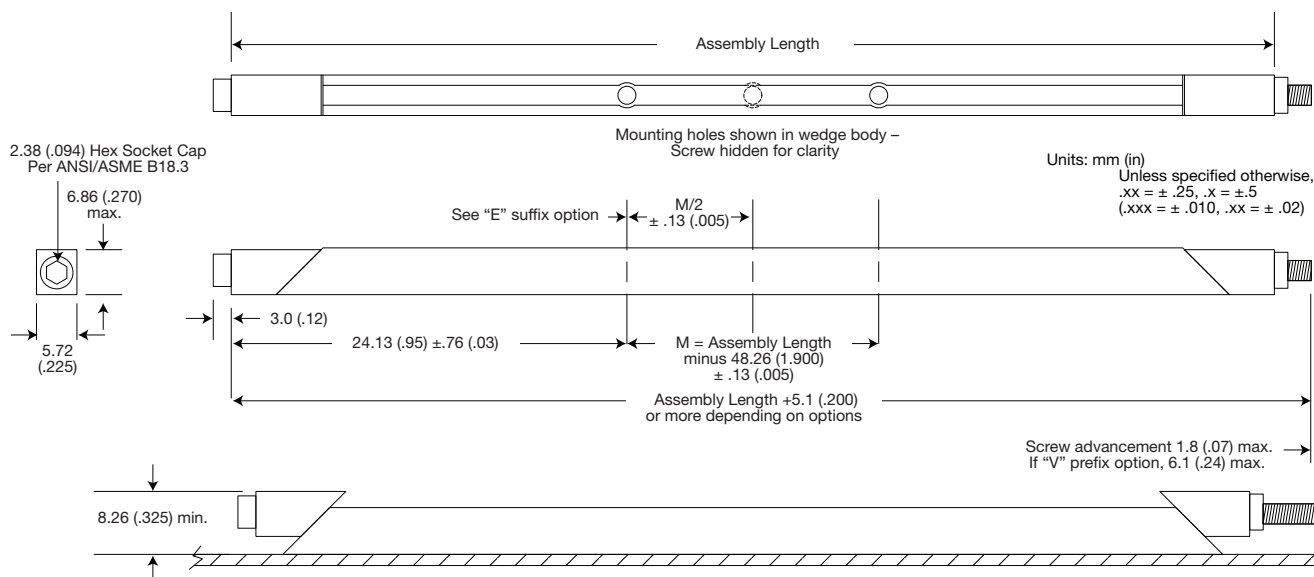
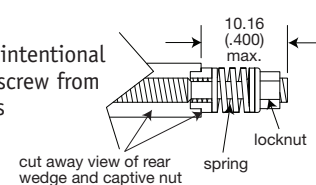
Detail "R"

Reduces the possibility of unintentional disassembly of the screw from rear wedge. This option adds 2.5 (.10) to the screw length unless combined with the "W" suffix option, then 5.1 (.20) total.



Detail "K"

Prevents the unintentional disassembly of screw from rear wedge. This option adds 5.1 (.20) to the screw length.



Units: mm (in)
Unless specified otherwise,
.xx = ± .25, .x = ± .5
(.xxx = ± .010, .xx = ± .02)

Part Number Code

Series 225 Card-Lok Three Piece

Prefix options

Metric Screw Head M2.5 Hex Drive M
Standard Screw Head 3/32 [blank]
Lock and Flat Washer W
None [blank]
Visual Indicator V
No Visual Indicator [blank]
Black Anodize A
or choose from Finish Table see table

Suffix options

Stainless Steel Captive (and Lock Nut if "R" option is also selected) CR
Standard Plated Steel "-
Assembly length in inches. Standard lengths range from 71.12 (2.80), 96.52 (3.80) and 121.9 (4.80) length.xx
Other lengths available upon request
Additional Center Mounting Hole E
None [blank]
Mounting Options - holes for rivet mounting or choose from Mounting Option Table see table
Lock Element L
None [blank]
Lock Nut R
Captive Screw K
None [blank]

Part Number Code Example:

VA225CR4.80HR

Series 225 Card-Lok three piece 121.9 (4.80) long with Visual Indicator, Black Anodized Finish, standard rivet mounting hole and stainless steel captive nut and lock nut option.

FINISH TABLE

Code Letter	Finish
<u> [blank] </u>	Chemical Film per Mil-C-5541 Class 1A, Gold
<u> "R" </u>	Chemical Film per Mil-DTL-5541 Class 3, Type II, Clear
<u> "A" </u>	Black Anodize per Mil-A-8625 Type II, Class 2
<u> "HA" </u>	Hard Black Anodize per Mil-A-8625 Type III, Class 2
<u> "EN" </u>	Electroless Nickel per Mil-C-26074 Class 4, Grade B, Bright

MOUNTING METHOD TABLE

Code Letter	Method
<u> [blank] </u>	No mounting holes
<u> "H" </u>	Rivet Mounting Ø1.70 (.067) hole with 3.96 (.156) counterbore x 5.08 (.200) deep and 100° x 3.56 (.140) countersink.
<u> "TO" </u>	0-80 tapped hole
<u> "T2" </u>	2-56 tapped hole
<u> "TM2" </u>	M2 x 0.40 tapped hole
<u> "TM2.5" </u>	M2.5 x 0.45 tapped hole