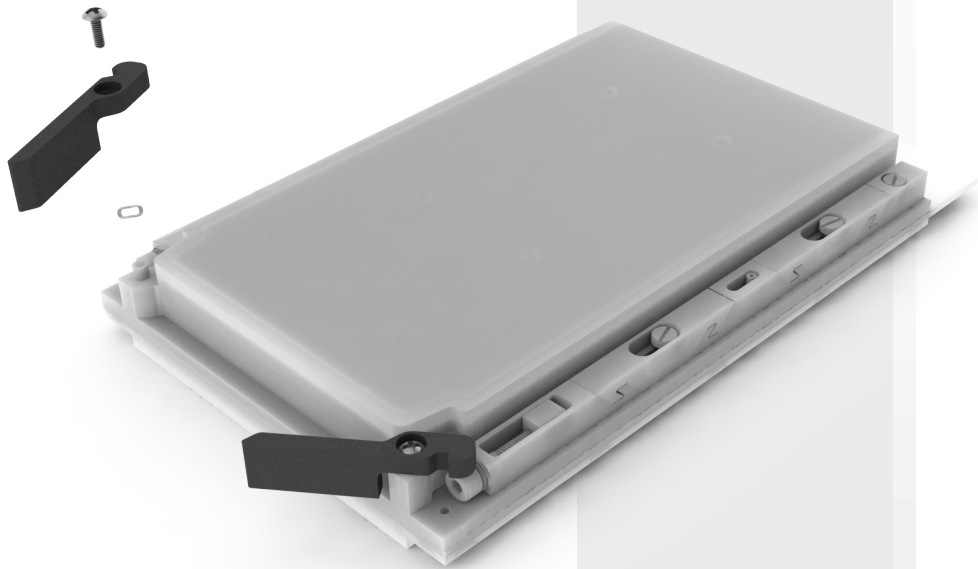


# 452E POST EJECTOR DATA SHEET

The 452E ejectors are a ready to go insertion and extraction solution for embedded computing heat frames. The 452E can adapt to 3U or 6U frames through material and length options. The slim design allows for maximum PCB component space. Designed for VITA 48 applications this ejector is ready to be inserted into any design.



## FEATURES

- Designed for use in VITA 48 applications
- Mechanical advantage: 2.7x - 3.9x
- Material: 6061-T6 aluminum, or 7075-T6 aluminum
- Nominal ejection distance: .23"
- Maximum injection/ejection output 34-110 lbs
- Special lengths, finish, and other design options available upon request

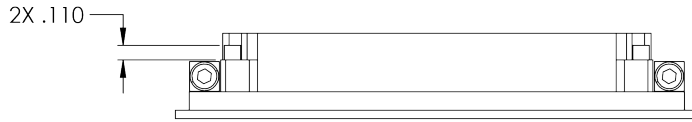
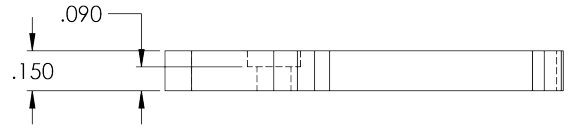
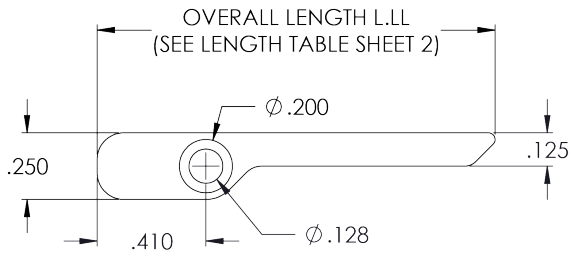
## HARDWARE INCLUDED

- Extra-wide truss head no. 1 Philips screw, M2 x 6mm l, stainless steel, passivate  
Recommended screw torque is 3.5 in-lbs (40 N-cm)
- 18-8 SS .190" OD wave washer

For complete  
heatframe  
assembly  
or other  
component  
items,

**CONTACT  
WAKEFIELD**

# GENERAL DIMENSIONS



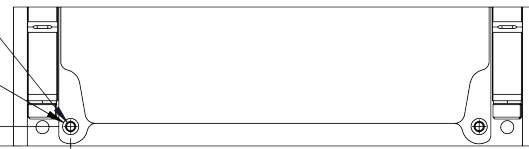
RECOMMENDED EJECTOR POST HEIGHT  
SCALE 1 : 1

2X M2X0.4 - 6H  $\nabla$  .250 MIN

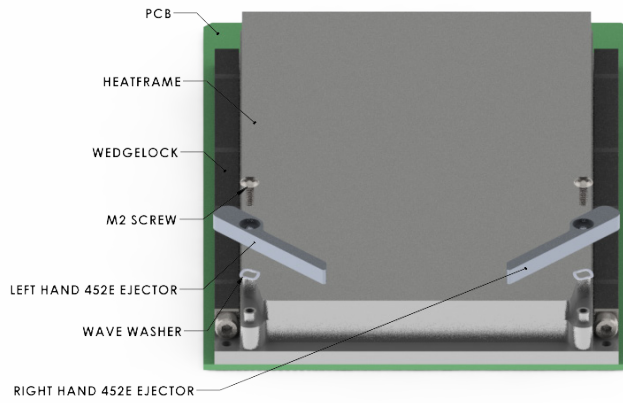
2X Ø.122<sup>+0.000</sup><sub>-.005</sub>

2X .145

2X .430



RECOMMENDED HOLE LOCATIONS  
FROM PCB EDGE  
SCALE 1 : 1



**NEED DESIGN ASSISTANCE?**

[Wakefieldthermal.com](http://Wakefieldthermal.com)

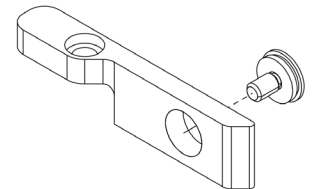
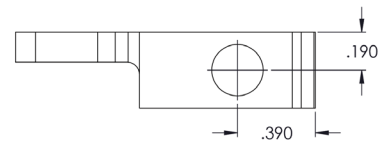
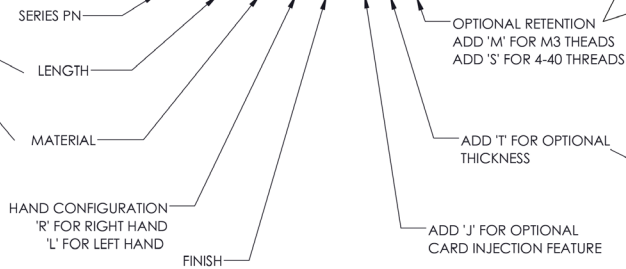


# DESIGN OPTIONS

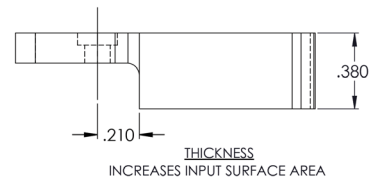
LENGTH AND MATERIAL TABLE						
[LLL]	LLL (IN.) OVERALL LENGTH	[M] MATERIAL CODE	MATERIAL	RECOMMENDED FOR	MECHANICAL ADVANTAGE	MAX INJECTION/EJECTION OUTPUT FORCE
150	1.50	U	6061-T6 ALUMINUM	3U-BOARDS	2.7x	60 LBS
150	1.50	V	7075-T6 ALUMINUM			110 LBS
200	2.00	U	6061-T6 ALUMINUM	6U-BOARDS	3.9x	34 LBS
200	2.00	V	7075-T6 ALUMINUM			62 LBS

## PART NUMBER CODE

452E-[LLL][M][H][F]-[J][T][C]



**CAPTIVE SCREW RETENTION**  
REDUCES COMPONENT RATTLING DURING OPERATION  
REQUIRES THICKNESS [T]



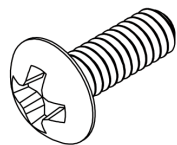
**THICKNESS**  
INCREASES INPUT SURFACE AREA



**CARD INJECTION FEATURE**  
AVOIDS INTERFERENCE WITH INJECTION SURFACE

[F] FINISH TABLE	
DASH NO	DESCRIPTION
A	NO FINISH
G	CHROMATE PER MIL-DTL-5541, CLASS 1A, TYPE I (GOLD)
T	TRIVALENT CHROMATE PER MIL-DTL-5541, CLASS 1A, TYPE II (CLEAR), RoHS COMPLIANT
B	BLACK ANODIZE PER MIL-A-8625, TYPE II, CLASS 2
H	HARD BLACK ANODIZE PER MIL-A-8625, TYPE III, CLASS 2
E	ELECTROLESS NICKEL PER MIL-C-26074, CLASS 4, GRADE B, BRIGHT
*N	NADCAP COMPLIANT (EX: 'BN' - BLACK ANODIZE, NADCAP)

### INCLUDED HARDWARE



NO. 1 PHILLIPS M2X 6MM SCREW  
SCALE 4 : 1



.190" OD WAVE WASHER  
SCALE 4 : 1

**CONTACT  
WAKEFIELD**

603.635.2800



**COOLVATION**  
Innovative Thermal Solutions

# 5 STEP THERMAL ENGINEERING GUIDE From Concept To Cooling

COOLVATION provides thermal management engineering services to improve products' thermal performance while applying cost effective solutions to eliminate unnecessary manufacturing costs. COOLVATION is a seamless resource extension for our customers' thermal & mechanical engineering teams from ideation to lab testing.



## Customer Thermal Challenge

- Physical limitations
- Power constraints
- Air flow/ fluid conditions
- Environmental conditions
- Component specifications
- Define ideal state

01  
STEP



## Execution

- Concept analysis (CFD-ansys/ ice pack, fin optimizations software)
- Solid model
- Analysis & verification
- Cost analysis

03  
STEP



## Global Manufacturing

- Global manufacturing facilities
- Global warehousing
- Global labs to support future program

05  
STEP



## Collaboration

- Review conditions
- Statement of work to customer
- Historical consideration along with cutting edge technologies to provide cost effective solution

02  
STEP



## Solution & Verification

- Dedicated new product development center
- Prototype
- Physical thermal lab testing
- Proven manufacturability

04  
STEP

