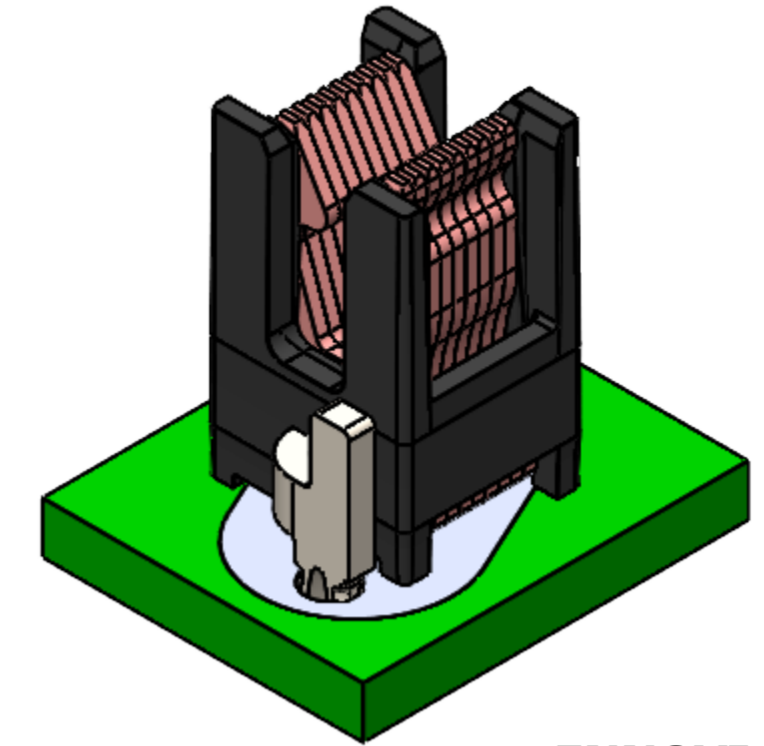
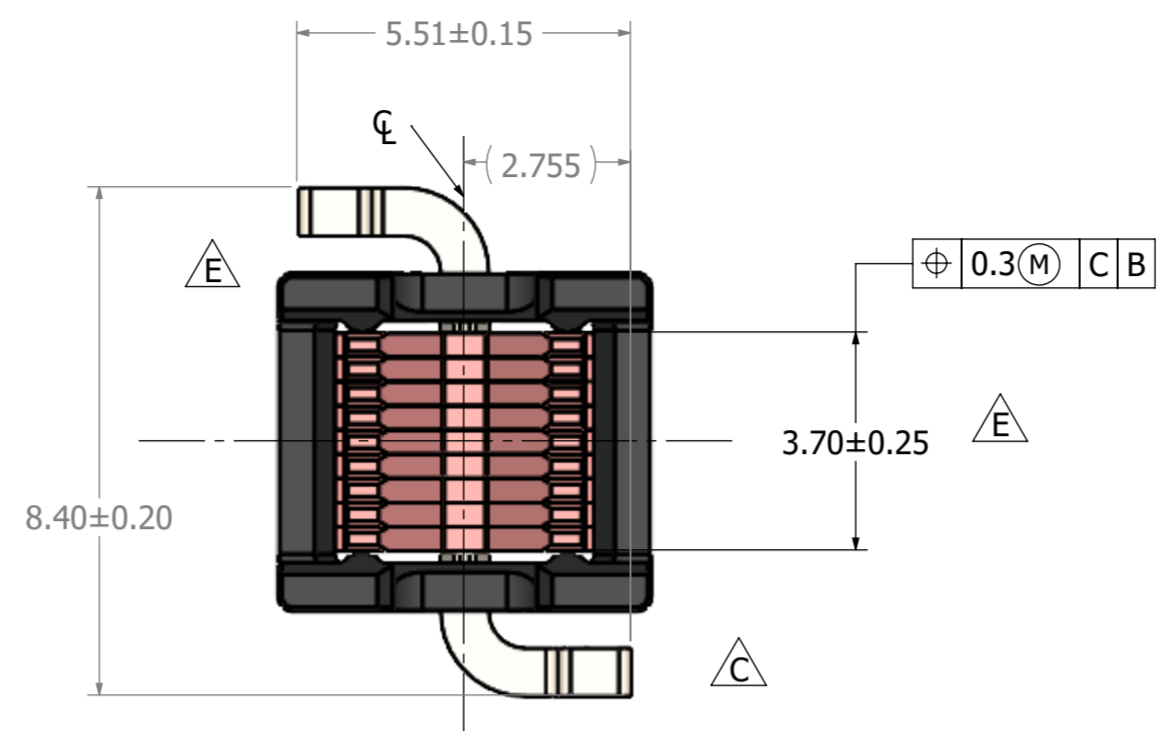


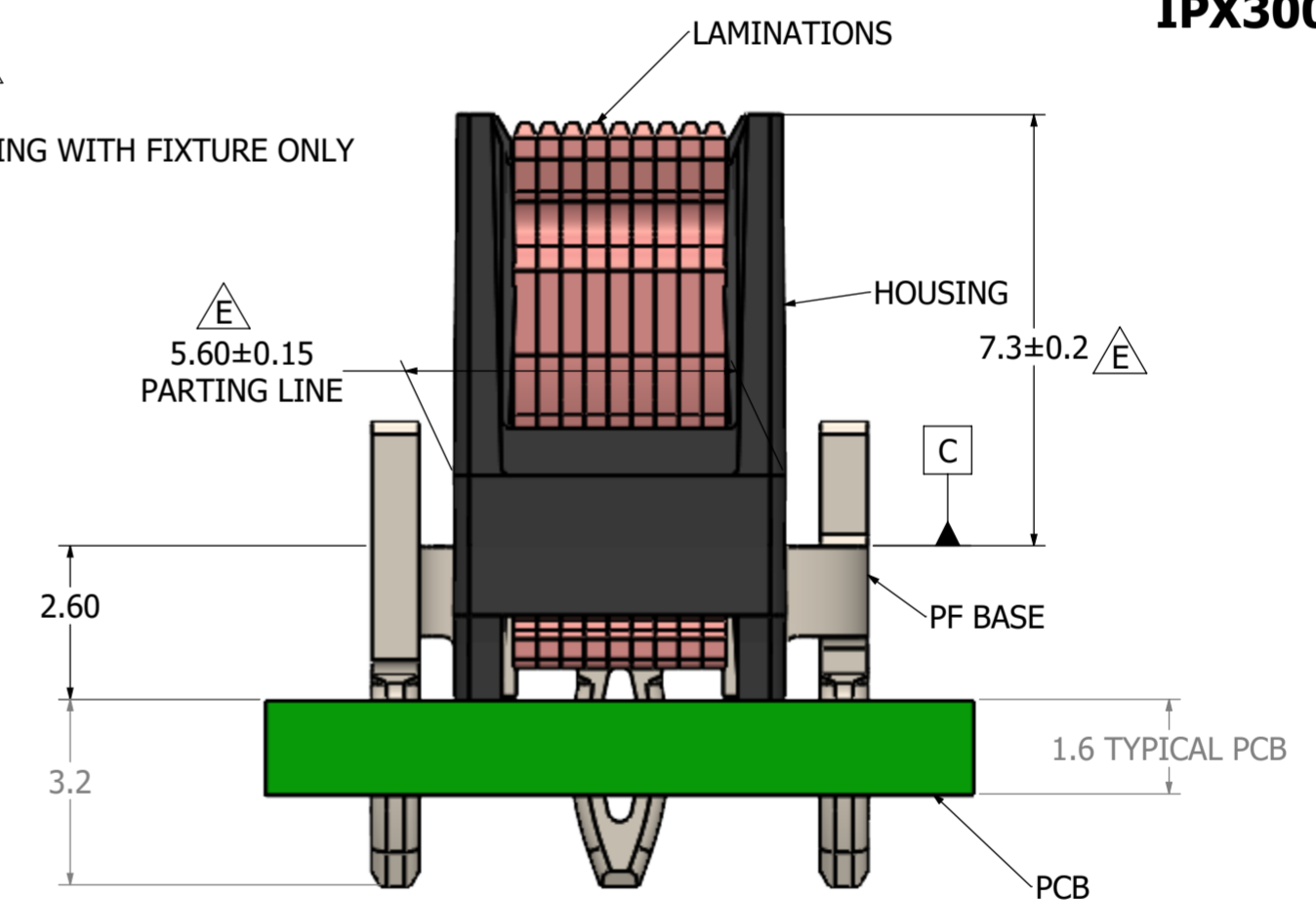
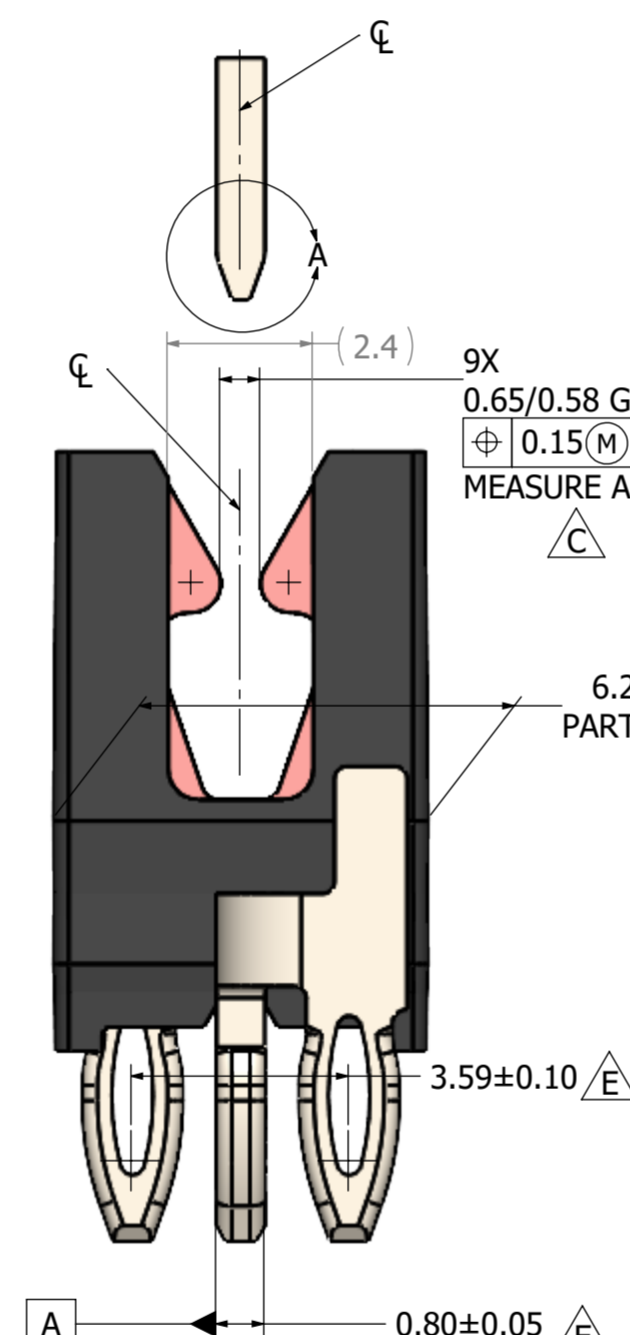
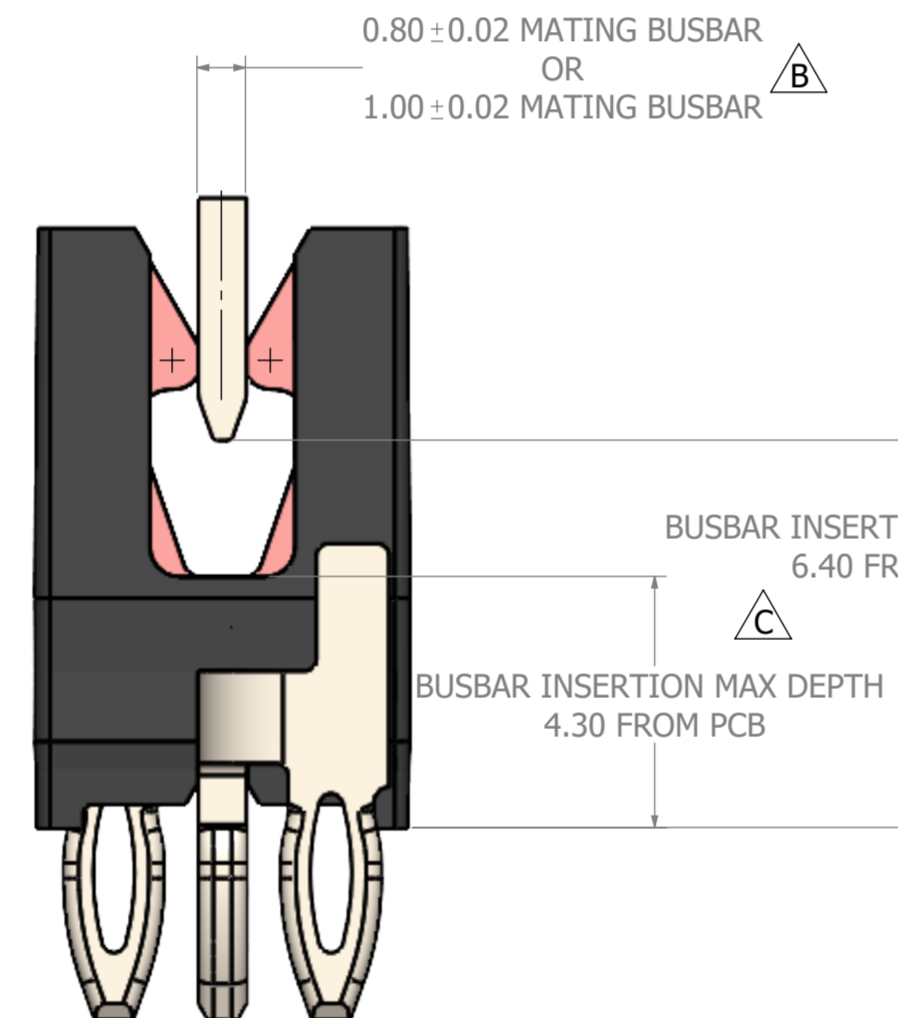
NOTES (UNLESS OTHERWISE NOTED):

- CONSTRUCTION:  
STAMPINGS: CuNiSi (LAMINATIONS & PF BASE)  
HOUSING: GLASS-FILLED PPA  
PLATING: POST-PLATED TIN OVER SULFAMATE NICKEL (LAMINATIONS AND PF BASE)
- TYPICAL ASSEMBLY FORCES FOR MATING BLADE INTO LAMINATIONS:  
APPROXIMATELY 90N TYPICAL FOR 0.8mm BUSBAR  
APPROXIMATELY 205N TYPICAL FOR 1.0mm BUSBAR  
NOT APPROVED FOR USE OF 0.8mm BUSBAR AFTER INSERTION AND REMOVAL OF 1.0mm BUSBAR.  
HOWEVER, ACTUAL INSERTION FORCE DEPENDENT ON MATING BLADE THICKNESS, PLATING, LEAD-IN GEOMETRY, BLADE RAW MATERIAL AND INSERTION SPEED.  
PRESS-FOOT BASE INTO PCB: APPROXIMATELY 450N TYPICAL.  
RECOMMENDED USE ENNOVI-SUPPLIED END-ARM TOOLING IPX17173
- REFERENCE APPLICATION DRAWING E-MLG3034-APP FOR PRESS-FIT DETAILS
- MATING CYCLES:  
TESTED TO 3 CYCLES WITH CONTROLLED, REPEATABLE ASSEMBLY METHOD
- AMBIENT TEMPERATURE: 125°C MAXIMUM. FOR REFERENCE ONLY, MAXIMUM DEVICE TEMPERATURE 160°C.
- USERS MUST ALWAYS VALIDATE AND QUALIFY BusMate® IN THEIR OWN APPLICATION
- UNDER RARE CIRCUMSTANCES, A SHIFT IN THE LAMINATIONS MAY OCCUR. HOWEVER, SHIFT LESS THAN 0.55mm WILL NOT AFFECT THE INSERTION PROCESS. REALIGNMENT IF THE LAMINATION IS ALSO POSSIBLE WITHOUT DEGRADATION OF THE CONTACT SURFACE.
- CLEANLINESS REQUIREMENT: MAXIMUM 500µm METALLIC PARTICLE IS ALLOWED.

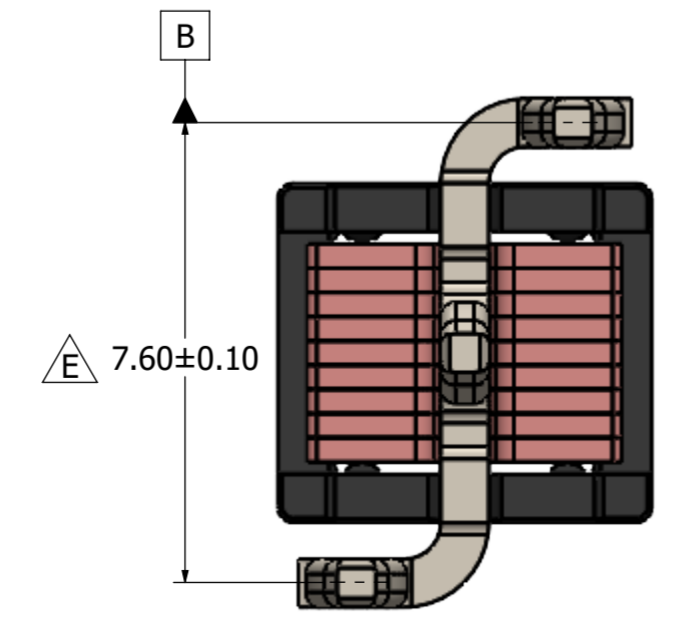
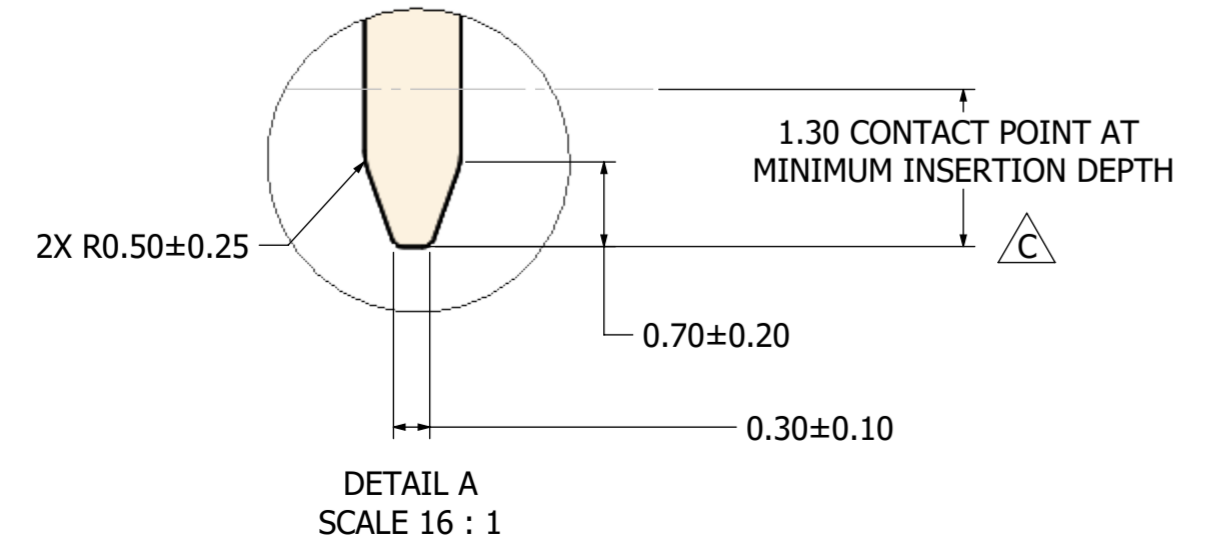
REVISIONS				
REV.	DESCRIPTION	DATE	APPROVED	DCN
A	INITIAL RELEASE	5/27/2021	AP	202112
B	ADDED DETAILS FOR 1mm BUSBAR	9/2/2021	GT	202113
C	REMOVED REDUNDANT DIMENSIONS	11/12/2021	GT	202119
D	UPDATED NOTE 2, ADDED NOTE 7	2/14/2024	GT	202402
E	TOLERANCE AND NOTE MODIFICATION CLEANLINESS SPEC PACKAGE INFO AND TOLERANCE MODIFICATION	2024/7/3	JK	202410
F	NOTE 5 UPDATED AND BLADE PLATING REDEFINITION: 1-3 µm Sn (or Ag) over 1-4 µm Ni	2024/10/17	JK	202417



**ENNOVI PART#  
IPX30013**



**MATING BUSBAR**  
BUSBAR MATERIAL: COPPER / COPPER ALLOY, 1/2 HARD MIN RECOMMENDED  
SUGGESTED PLATING: 1-3 µm Sn (or Ag) over 1-4 µm Ni  
RECOMMENDED BLADE WIDTH: 5.6mm MIN

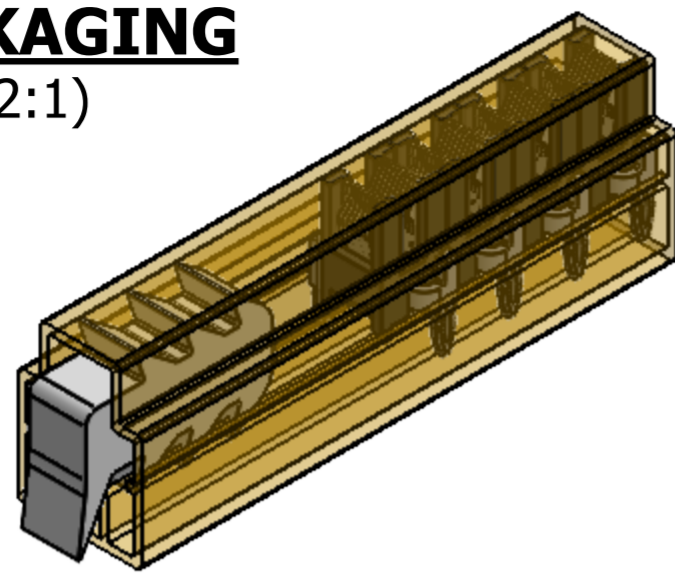
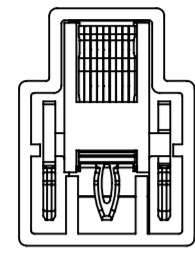


UNLESS OTHERWISE SPECIFIED:  
DIMENSIONS ARE IN MM  
TOLERANCES:  
.X ±.1  
.XX ±.07  
.XXX ±.03  
ANGULAR: ±2°

<b>ENNOVI™</b>		TITLE:	BusMate®, 9LAM PRESS-FIT 40-60 AMP, 0.8mm MATING BUSBAR	SCALE:	8:1	SIZE:	A2
		DRAWING NO.:	E-IPX30013	REV.:	F	SHEET:	1 / 2

# TUBE PACKAGING

(SCALE 2:1)



(TRAY PACKAGING ALSO AVAILABLE)

	TUBE LENGTH	TUBE WIDTH	TUBE HEIGHT	QTY PER TUBE
1	340mm(13.4")	12mm	16mm	50 PCS
2				
3				

△E

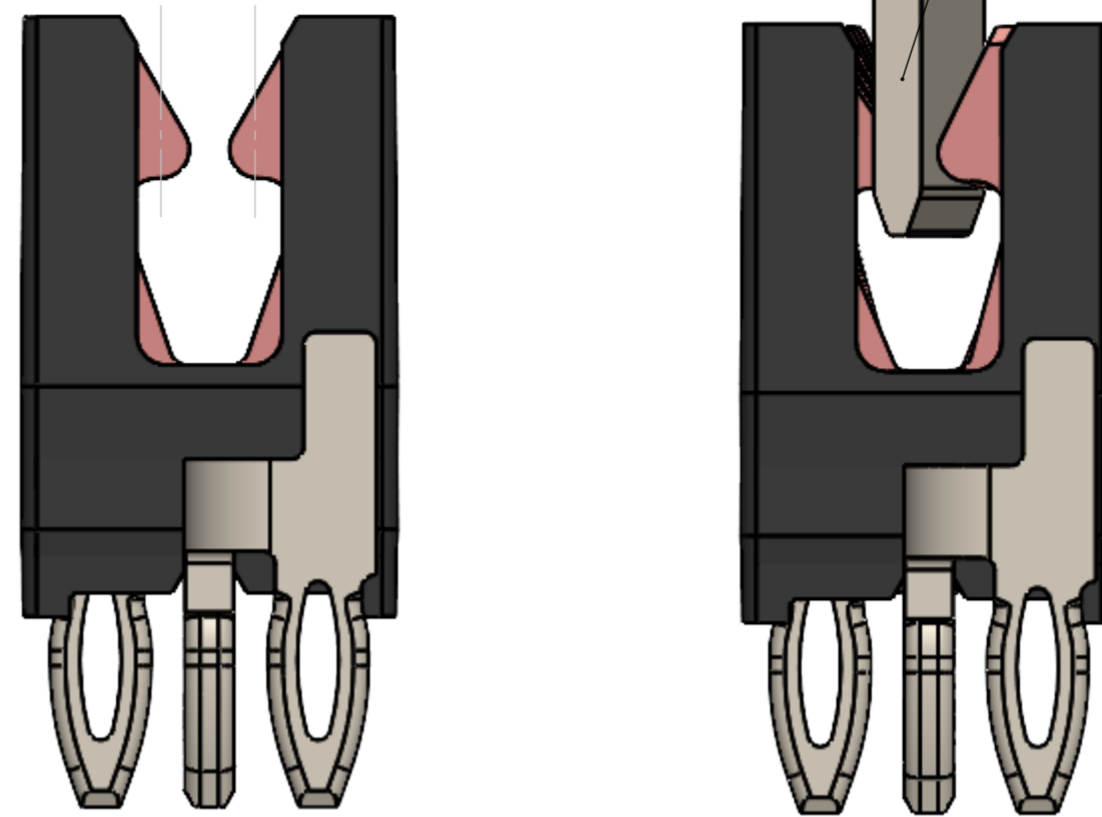
±0.80 ALLOWABLE BLADE OFFSET FOR 0.8mm BUSBAR  
 ±0.70 ALLOWABLE BLADE OFFSET FOR 1.0mm BUSBAR

△B

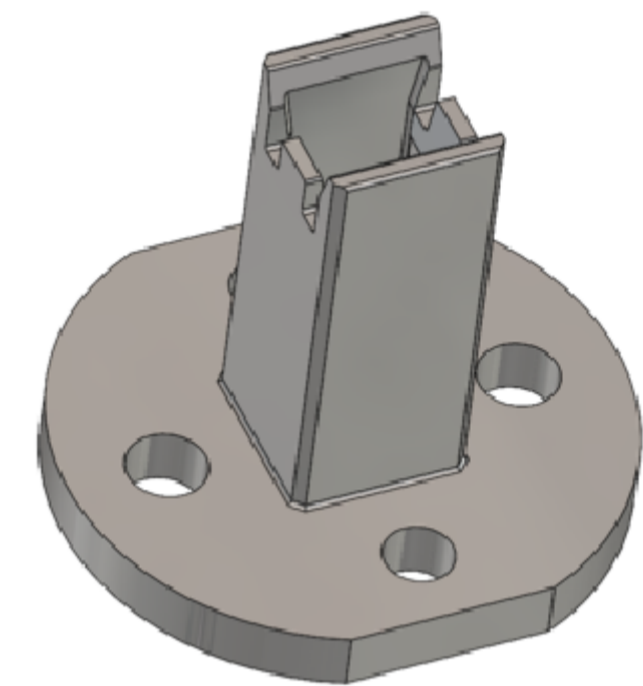
△B

MATING BUSBAR

MATING BUSBAR UP TO 16° TWIST FOR 0.8mm BUSBAR  
 MATING BUSBAR UP TO 14° TWIST FOR 1.0mm BUSBAR



# INSERTION TOOL GEOMETRY

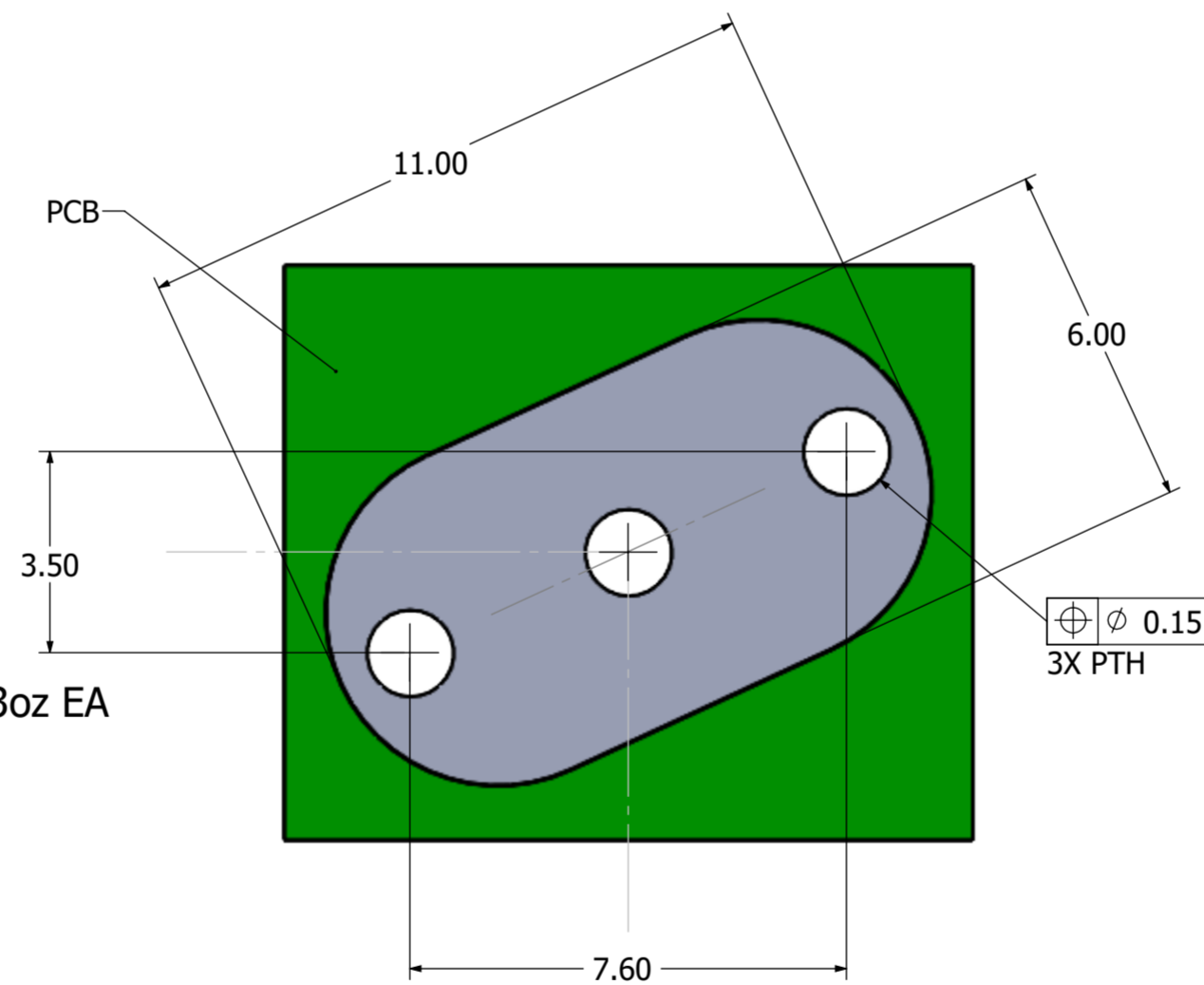


△C

PART #: IPX30013-T  
 CONSULT ENNOVI FOR DETAILS

# SUGGESTED PCB PAD LAYOUT

- \* SEE HOLE CONSTRUCTION TABLE, BELOW
- \* OVAL PAD 3oz COPPER, BOTH SIDES OF BOARD
- RECOMMENDED: PCB TRACES, HEAVY COPPER TRACES, 2 LAYERS, 3oz EA



## HOLE CONSTRUCTION TABLE

		METRIC (mm)
REQUIRED PCB HOLE CONSTRUCTION (FR-4 Tg=170MIN)	DRILL (USE $\phi 1.6$ METRIC DRILL)	$\phi 1.600 \pm 0.025$
	COPPER THICKNESS	$0.050 \pm 0.025$
	PLATED-THROUGH HOLE (PTH) DIAMETER	$\phi 1.50 \begin{matrix} +0.04 \\ -0.05 \end{matrix}$
APPLICABLE FOR NOMINAL PCB THICKNESS 1.5mm OR THICKER		
CONSULT PRODUCT ENGINEERING FOR OTHER PCB THICKNESS PLATING, AND CONSTRUCTION		

UNLESS OTHERWISE SPECIFIED:  
 DIMENSIONS ARE IN MM  
 TOLERANCES:  
 .X ±.1  
 .XX ±.07  
 .XXX ±.03  
 ANGULAR: ±2°

# ENNOVI™

TITLE:	BusMate®, 9LAM PRESS-FIT 40-60 AMP, 0.8mm MATING BUSBAR	SCALE:	8:1	SIZE:	A2
DRAWING NO.:	E-IPX30013	REV.:	F	SHEET:	2 / 2