

NOTES (UNLESS OTHERWISE NOTED):

1. CONSTRUCTION:

STAMPINGS: CuNiSi (LAMINATIONS) & COPPER (SMT BASE)

HOUSING: GLASS-FILLED PPA

PLATING: POST-PLATED SILVER OVER SULFAMATE NICKEL  
(LAMINATIONS AND SMT BASE)

2. TYPICAL ASSEMBLY FORCES FOR MATING BLADE INTO LAMINATIONS:

APPROXIMATELY 135N TYPICAL FOR 0.8mm BUSBAR.  $\triangle G$

HOWEVER, ACTUAL INSERTION FORCE DEPENDENT ON MATING BLADE THICKNESS, PLATING, LEAD-IN GEOMETRY, BLADE RAW MATERIAL AND INSERTION SPEED.

3. MATING CYCLES:

TESTED TO 3 CYCLES WITH CONTROLLED, REPEATABLE ASSEMBLY METHOD

4. AMBIENT TEMPERATURE: 125°C MAXIMUM. FOR REFERENCE ONLY, MAXIMUM DEVICE TEMPERATURE 160°C.  $\triangle J$

5. SUGGESTED SOLDER MASK DEFINED SOLDER PAD IS OPTIMIZED FOR PART PLACEMENT AND ORIENTATION.

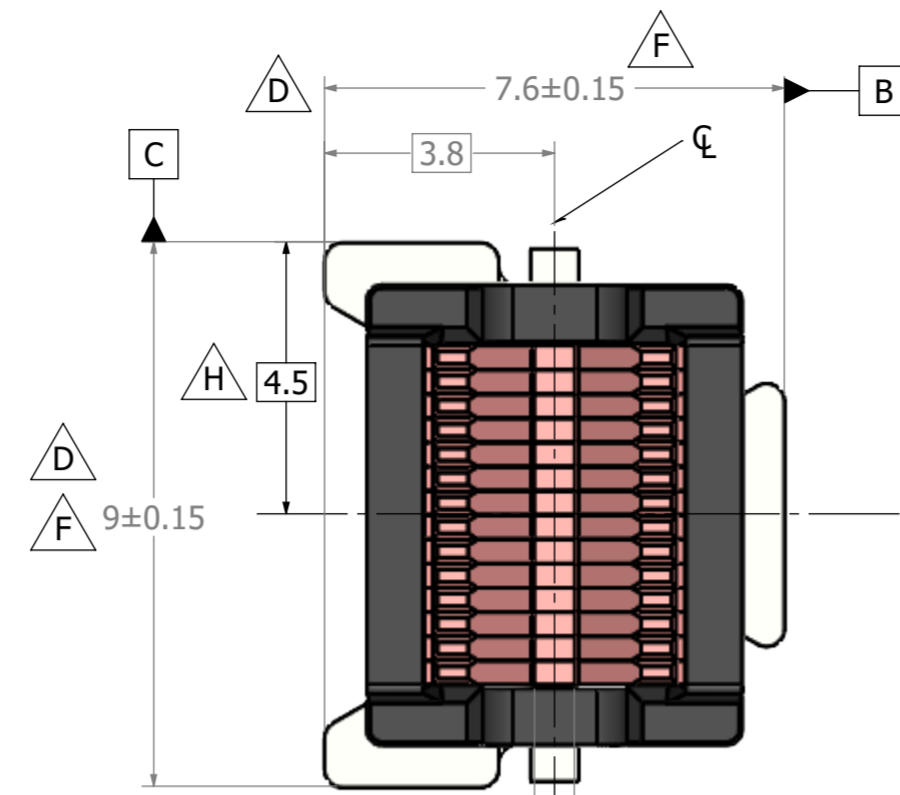
6. COPPER PAD UNDER SOLDER MASK GEOMETRY ADJUSTABLE PER APPLICATION REQUIREMENTS.

7. USERS MUST ALWAYS VALIDATE AND QUALIFY BusMate® IN THEIR OWN APPLICATION

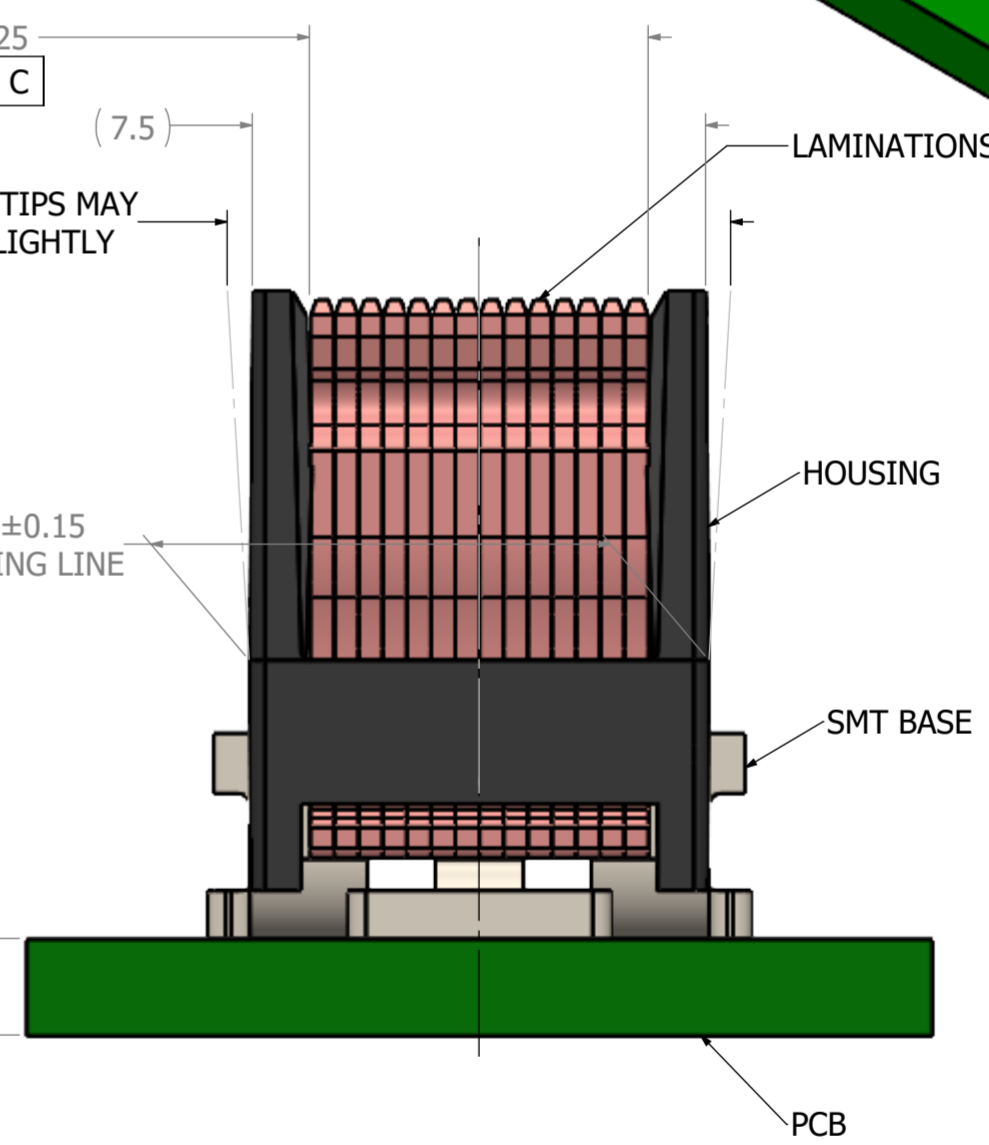
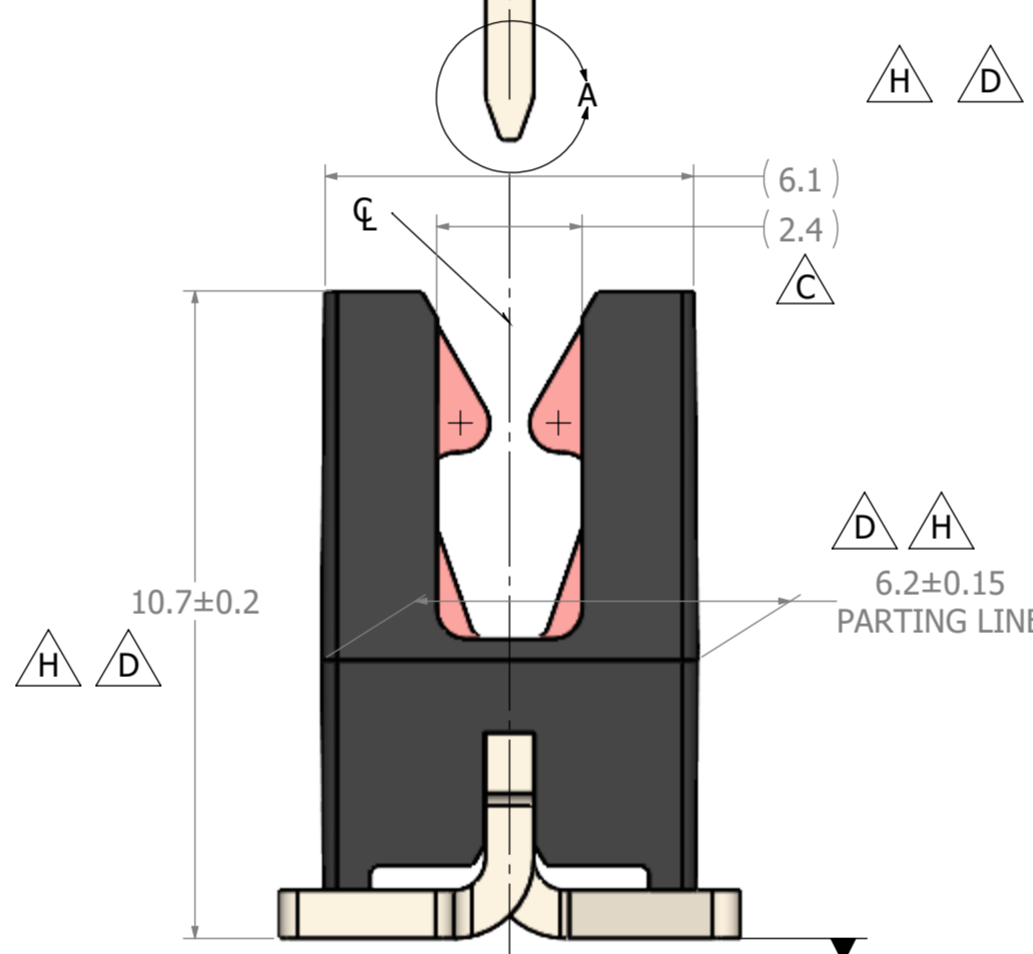
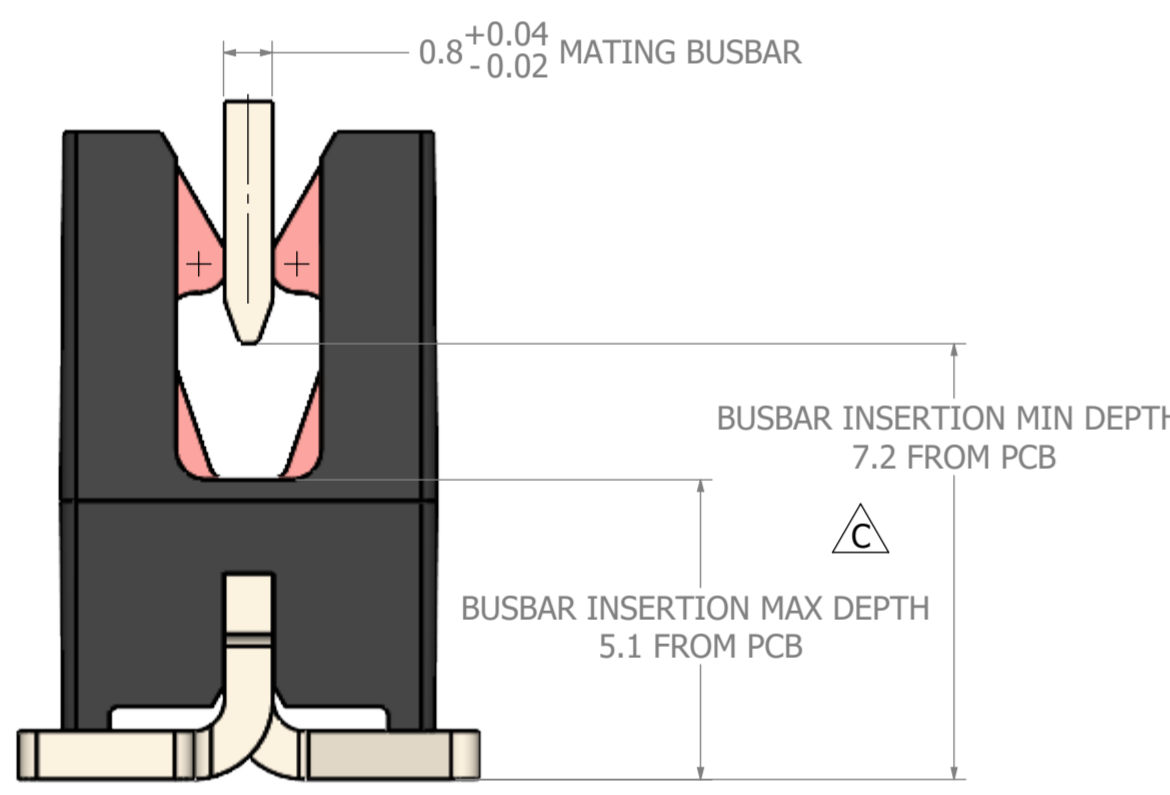
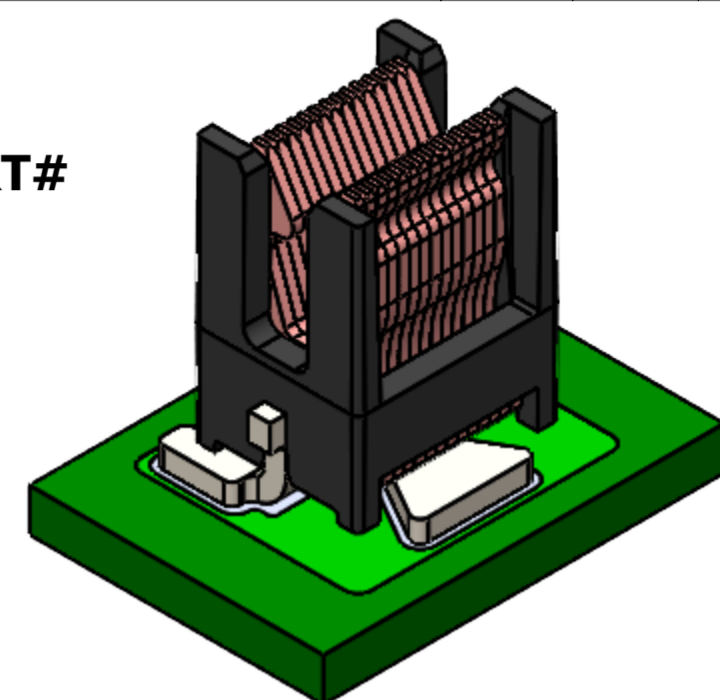
8. UNDER RARE CIRCUMSTANCES, A SHIFT IN THE LAMINATIONS MAY OCCUR. HOWEVER, SHIFT LESS THAN 0.55mm WILL NOT AFFECT THE INSERTION PROCESS. REALIGNMENT IF THE LAMINATION IS ALSO POSSIBLE WITHOUT DEGRADATION OF THE CONTACT SURFACE.  $\triangle G$

9. CLEANLINESS REQUIREMENT: MAXIMUM 500µm METALLIC PARTICLE IS ALLOWED.  $\triangle H$

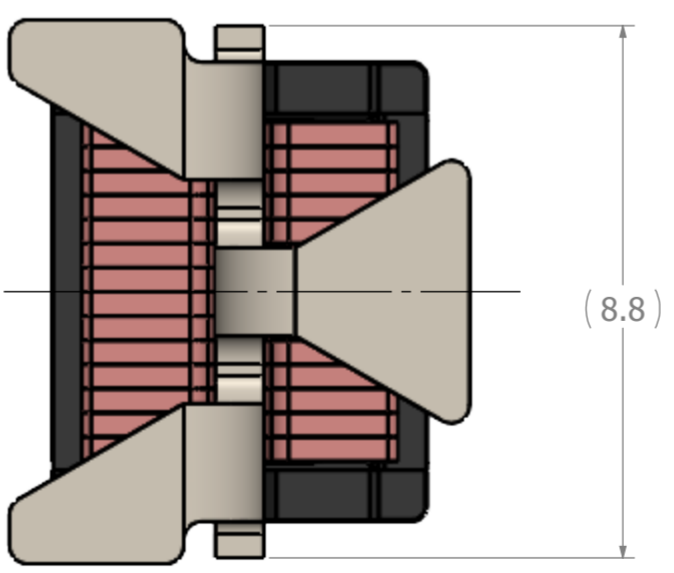
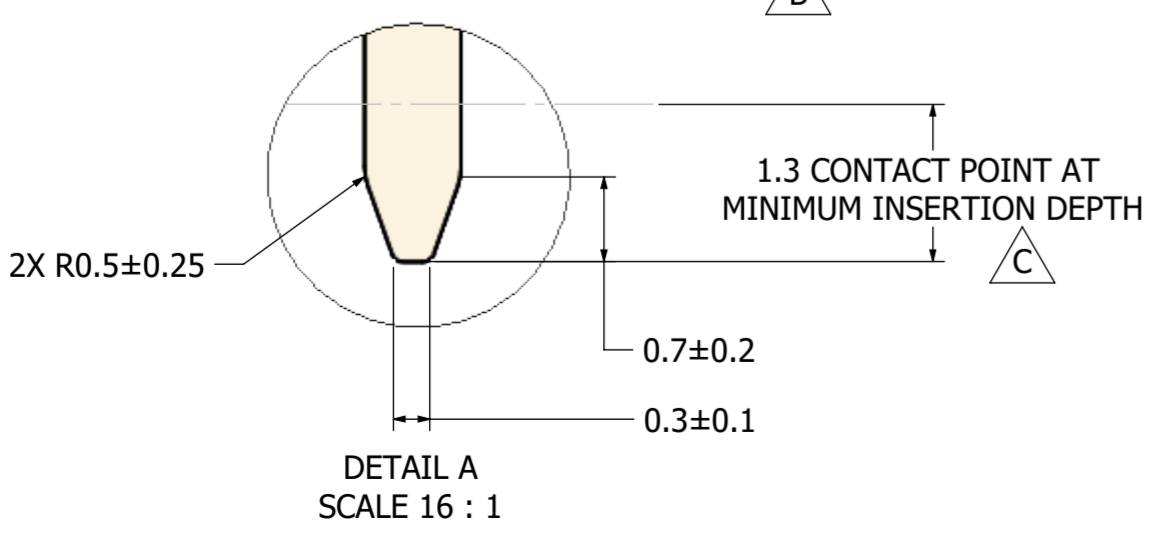
REVISIONS				
REV.	DESCRIPTION	DATE	APPROVED	DCN
A	INITIAL RELEASE	2021/5/27	GT	202112
B	CORRECTED BUSBAR BLADE WIDTH, INSERTION FORCE	2021/9/2	GT	202113
C	REMOVED REDUNDANT DIMENSIONS	2021/11/12	GT	202119
D	(7.6) WAS 7.60±0.15; (9) WAS 9.00±0.15; ADDED DATUMS A,B,C	2022/12/13	GT	202301
E	REMOVED REFERENCE INDICATION, 0.63/0.58 WAS (0.61)	2023/1/26	GT	202302
F	7.6±0.15 WAS (7.6); 9±0.15 WAS (9); ADDED GRIPPER IMAGE	2023/8/4	GT	202311
G	UPDATED NOTE 2, ADDED NOTE 8	2024/2/13	GT	202402
H	ADD CLEANLINESS SPEC PACKAGE INFO AND TOLERANCE MODIFICATION	2024/7/3	JK	202410
J	NOTE 4 UPDATED AND BLADE PLATING REDEFINITION: 1-3 µm Sn (or Ag) over 1-4 µm Ni	2024/10/17	JK	202417



**ENNOVI PART#  
IPX30055**



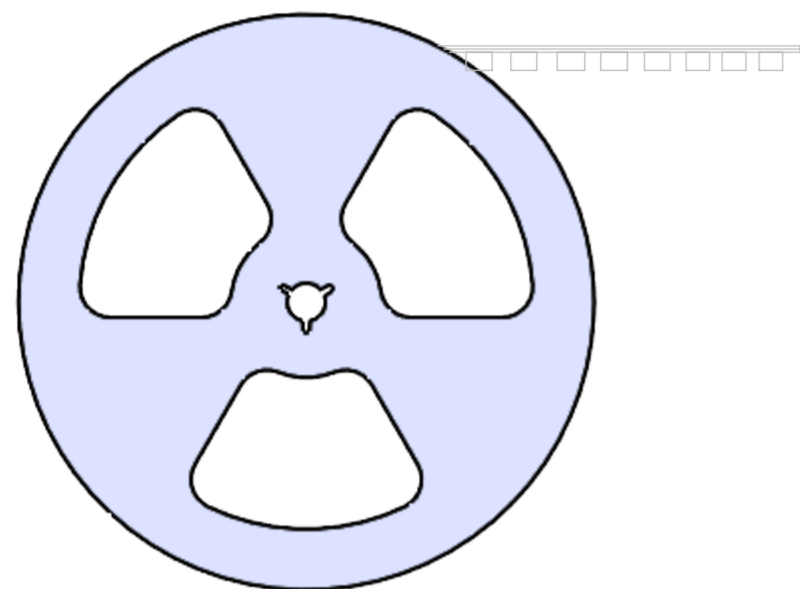
**MATING BUSBAR**  
BUSBAR MATERIAL: COPPER / COPPER ALLOY, 1/2 HARD MIN RECOMMENDED  
SUGGESTED PLATING: 1-3 µm Sn (or Ag) over 1-4 µm Ni  
RECOMMENDED BLADE WIDTH: 7.6mm MIN  $\triangle B$



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

<b>ENNOVI™</b> TITLE: BusMate®, 14 LAM SMT 60-80 AMP, 0.8mm MATING BUSBAR		SCALE:	SIZE:
		8:1	A2
DRAWING NO.: E-IPX30055		REV: J	SHEET: 1 / 2

# REEL PACKAGING

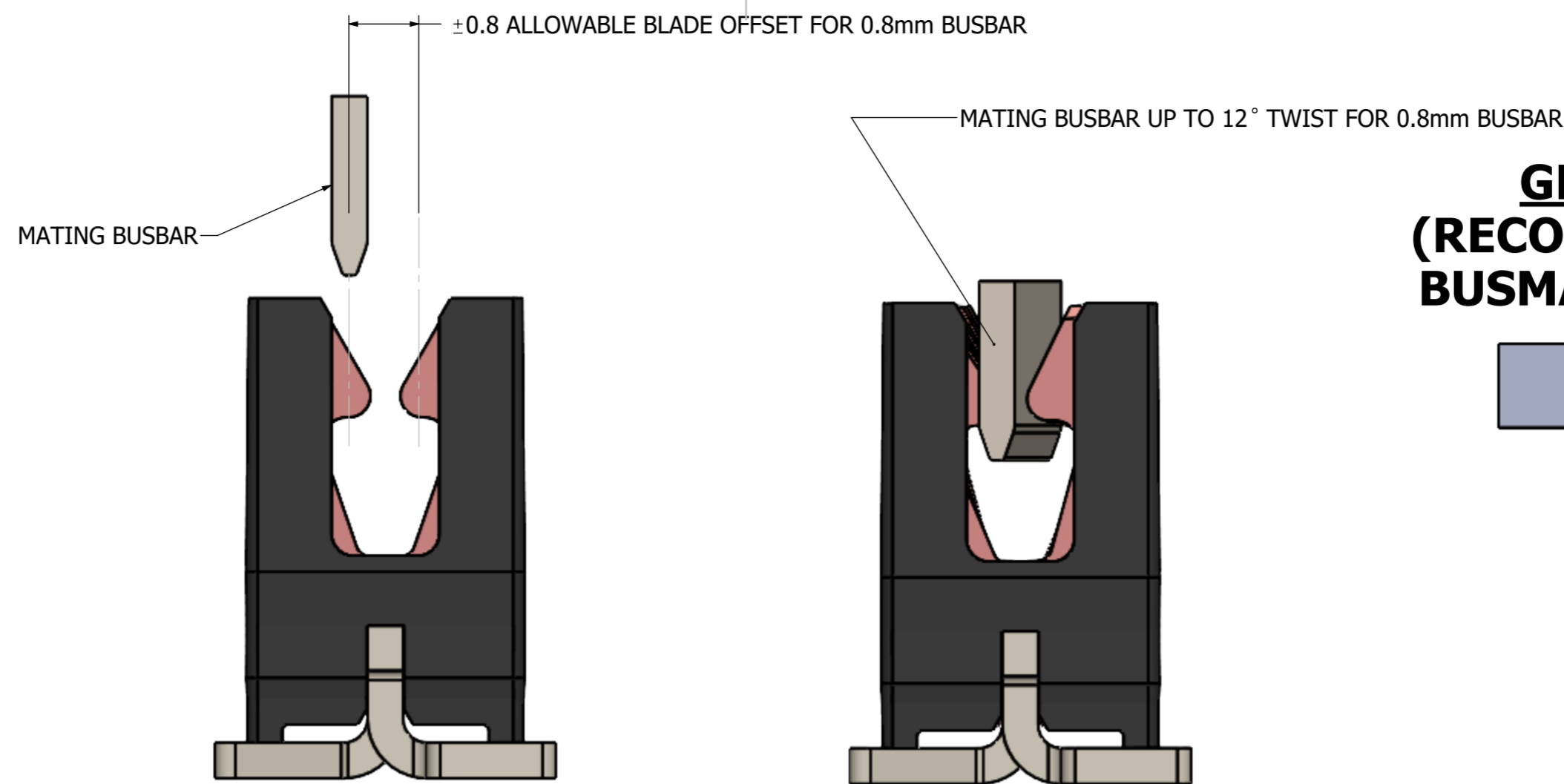
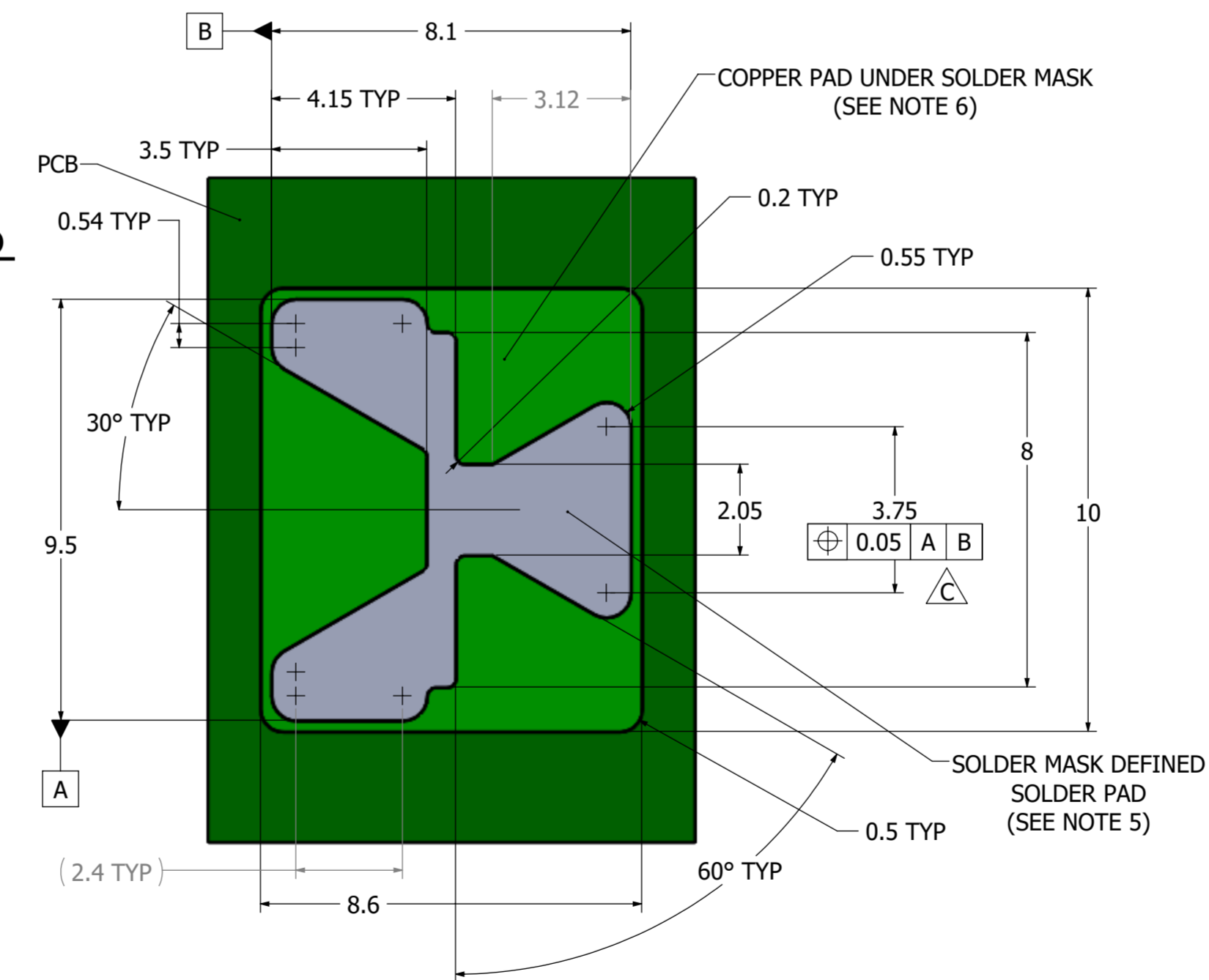


(TRAY PACKAGING ALSO AVAILABLE)

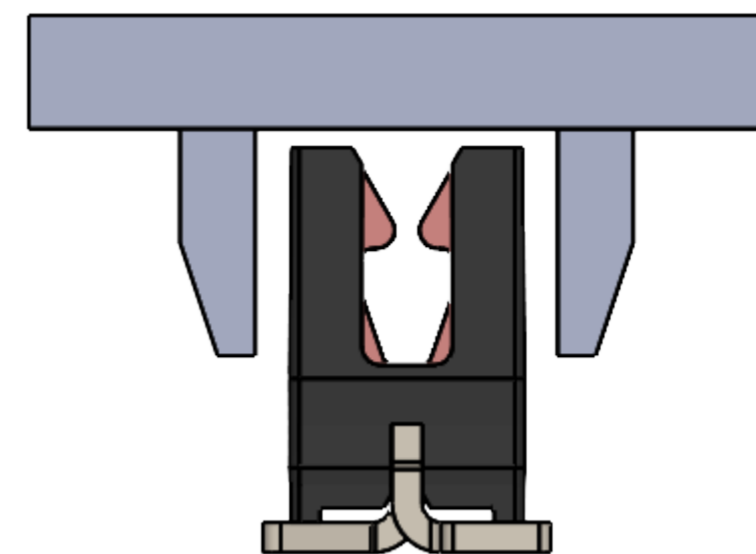
	REEL DIAMTER	TAPE WIDTH	PART PITCH	QTY PER REEL
1	380mm(15")	24mm	16mm	520 PCS
2				
3				

# SUGGESTED SOLDER MASK DEFINED SOLDER PAD AND COPPER PAD UNDER SOLDER MASK LAYOUT

RECOMMEND: SAC305 SOLDER PASTE, 5 MIL THICK

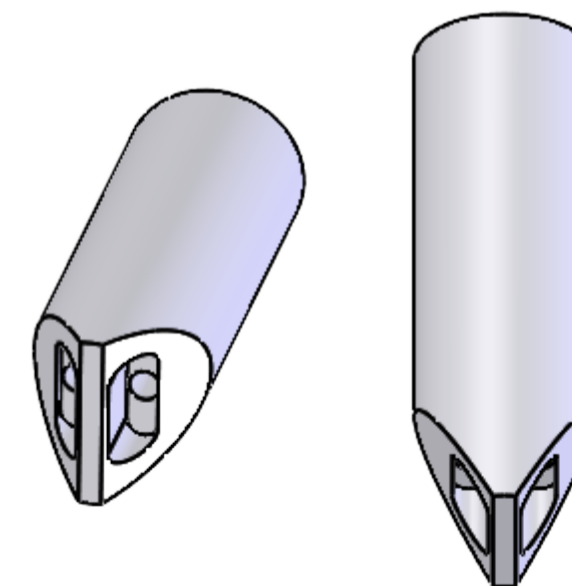


# GRIPPER GEOMETRY (RECOMMENDED/PREFERRED BUSMATE PICKING METHOD)



PREFERRED ORIENTATION GRIPPERS MUST BE PARALLEL TO H-CONTACT GAP AS SHOWN

# VACUUM NOZZLE TIP GEOMETRY



CONSULT ENNOVI FOR VENDOR INFORMATION

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

**ENNOVI™**

TITLE:	BusMate®, 14 LAM SMT 60-80 AMP, 0.8mm MATING BUSBAR	SCALE:	8:1	SIZE:	A2
DRAWING NO.:	E-IPX30055	REV.:	J	SHEET:	2 / 2