

***MIN SHEET THICKNESS .040**

UNIFIED (INCH)	THREAD SIZE	TYPE		THREAD CODE	LENGTH CODE "L" $\pm .015$										HOLE SIZE IN SHEET +.003 -.000	H $\pm .015$	S MAX	Min. Dist. Hole C/L To Edge
		ST	SS		.250	.312	.375	.500	.625	.750	.875	1.00	1.25	1.50				
	.086-56 (#2-56)	CHE	CHES	256	4	5	6	8	10	12	-	-	-	-	.085	.112	.080	.098
.112-40 (#4-40)	CHE	CHES	440	4	5	6	8	10	12	14	16	-	-	.111	.138	.085	.124	
.138-32 (#6-32)	CHE	CHES	632	4	5	6	8	10	12	14	16	20	24	.137	.164	.090	.150	
.164-32 (#8-32)	CHE	CHES	832	4	5	6	8	10	12	14	16	20	24	.163	.190	.090	.176	
.190-32 (#10-32)	CHE	CHES	1032	-	5	6	8	10	12	14	16	20	24	.189	.225	.100	.210	

***MIN SHEET THICKNESS 1 MM**

METRIC (MM)	THREAD SIZE	TYPE		THREAD CODE	LENGTH CODE "L" $\pm .015$										HOLE SIZE IN SHEET +.08 -.00	H $\pm .04$	S MAX	Min. Dist. Hole C/L To Edge
		ST	SS		6	8	10	12	15	18	-	-	-	-				
	M2.5X0.45	CHE	CHES	M2.5	6	8	10	12	15	18	-	-	-	-	2.5	3.15	2.1	2.8
M3X0.5	CHE	CHES	M3	6	8	10	12	15	18	20	25	-	-	3	3.65	2.1	3.3	
M3.5X0.6	CHE	CHES	M3.5	6	8	10	12	15	18	20	25	30	-	3.5	4.15	2.3	3.8	
M4X0.7	CHE	CHES	M4	6	8	10	12	15	18	20	25	30	35	4	4.65	2.4	4.3	
M5X0.8	CHE	CHES	M5	-	8	10	12	15	18	20	25	30	35	5	5.9	2.7	5.6	

MATERIAL & FINISH SPECIFICATIONS

TYPE	Threads	Materials	Standard Finish	Sheet Hardness Requirement
CHE	External ANSI B1.1 2B/ANSI/ASME B1.13M 6g	Heat treat Carbon Steel	Zinc per ASTM B 633 SC1	80 or less on the Rockwell "B" scale

- ALL ITEMS SUBJECT TO MINIMUM ORDER

ABOVE BOARD ELECTRONICS

1918 Junction Avenue

San Jose, CA 95131

PHONE - 800-453-1692

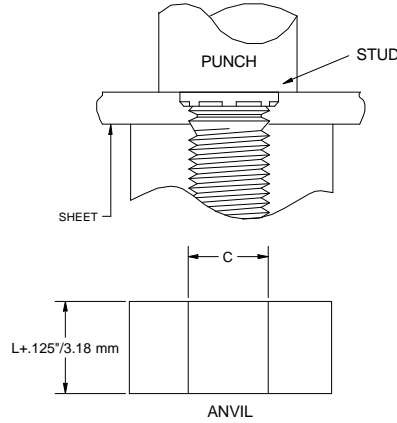
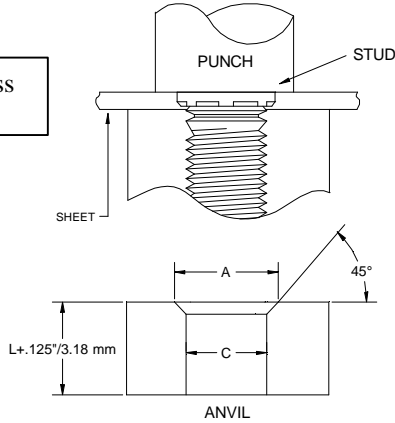
FAX - 408-573-4343

<http://www.AboveBoardElectronics.com>

INSTALLATION - CHE

- 1) Punch or drill the correct diameter mounting hole in sheet. Do not perform any secondary operations such as deburring.
- 2) Insert the stud through the mounting hole of the sheet and into the anvil as shown in the drawing.
- 3) With the punch and anvil surfaces parallel, apply only enough squeezing force to embed the stud's head flush in the sheet.

Tooling for panel thickness
.059 / 1.5 mm and less.



Tooling for panel thickness
.060 / 1.51 mm and greater.

UNIFIED	Thread Code	Anvil Dimensions (in)	
		A	C + .003
	256	.130-.134	.087
	440	.156-.160	.113
	632	.182-.186	.139
	832	.208-.212	.165
	1032	.234-.238	.191

METRIC	Thread Code	Anvil Dimensions (mm)	
		A	C + 0.08
	M2.5	3.6-3.7	2.53
	M3	4.1-4.2	3.03
	M3.5	4.6-4.7	3.53
	M4	5.1-5.2	4.03
	M5	6.1-6.2	5.03

PERFORMANCE DATA (1)

UNIFIED (inch)	Thread Code	Max. Nut Tightening Torque (in. lbs.)	Sheet Thickness And Material	Sheet Hardness HRB	Installation (lbs.)	Pushout (lbs.)	Torque Out (in. lbs.)	Pull Thru (lbs.)	Test Bushing Hole Size
	256	2.3	.047 Aluminum	33	700	55	4	230	.106
2.3		.045 Cold Rolled Steel	54	1200	85	8	425	.106	
440	4.0	.047 Aluminum	33	1000	60	5	300	.132	
	5.0	045 Cold Rolled Steel	54	1200	105	11	580	.132	
632	5.4	.047 Aluminum	33	1000	65	6.5	325	.158	
	9.0	045 Cold Rolled Steel	54	1500	110	15	650	.158	
832	6.9	.047 Aluminum	33	1200	80	9	350	.184	
	15.2	045 Cold Rolled Steel	54	1500	125	18	740	.184	
1032	9.7	.047 Aluminum	33	2500	115	18	395	.210	
	19.4	045 Cold Rolled Steel	54	4500	210	38	800	.210	

METRIC (mm)	Thread Code	Max. Nut Tightening Torque (N.m)	Sheet Thickness And Material	Sheet Hardness HRB	Installation (kN)	Pushout (N)	Torque Out (Nm)	Pull Thru (N)	Test Bushing Hole Size
	M2.5	.041	1.2mm Aluminum	33	3.1	285	0.55	1200	3
.041		1.1 mm Cold Rolled Steel	54	5.3	450	1.1	2250	3	
M3	.046	1.2mm Aluminum	33	4.4	285	0.65	1300	3.5	
	.074	1.1 mm Cold Rolled Steel	54	5.3	475	1.25	2500	3.5	
M3.5	.058	1.2mm Aluminum	33	4.4	290	0.76	1400	4	
	1.15	1.1 mm Cold Rolled Steel	54	6.6	500	1.75	2800	4	
M4	.075	1.2mm Aluminum	33	5.3	365	1.1	1550	4.5	
	1.7	1.1 mm Cold Rolled Steel	54	6.6	550	2.1	3300	4.5	
M5	1.11	1.2mm Aluminum	33	11.1	530	2.2	1850	5.5	
	2.25	1.1 mm Cold Rolled Steel	54	20	1000	4.4	3750	5.5	

(1) The installation, pushout, torque out, and pull thru values reported are averages when all installation specifications and procedures are followed. Variations in mounting hole size, sheet material and installation procedure will affect this data. Performance testing of this product in your application is recommended. We will be happy to provide samples for this purpose.