

**DESIGNED & DIMENSIONED
IN MILLIMETERS [ENGLISH]**

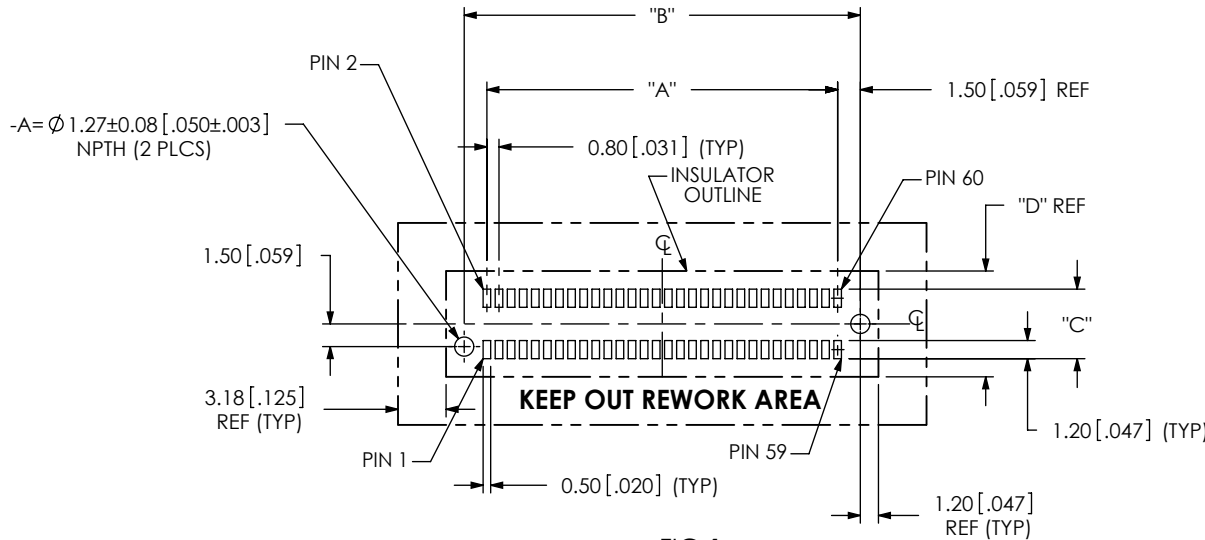


FIG 1
-30 POSITION SHOWN
USE FOR -10, *-13, -20, & -30 POSITIONS WITH -A OPTION

POSITION	"A"	"B"
-10	7.20[.283]	10.20[.402]
*-13	9.60[.378]	N/A
-20	15.20[.598]	18.20[.717]
-30	23.20[.913]	26.20[1.031]

*-13 POSITION IS ONLY AVAILABLE IN THIS FOOTPRINT WITH THE -PE OPTION

MATING CARD THICKNESS TYPE	"C"	"D"
-01	4.60[.181]	7.00[.276]
-02	5.03[.198]	7.43[.293]
-03	5.39[.212]	7.79[.307]

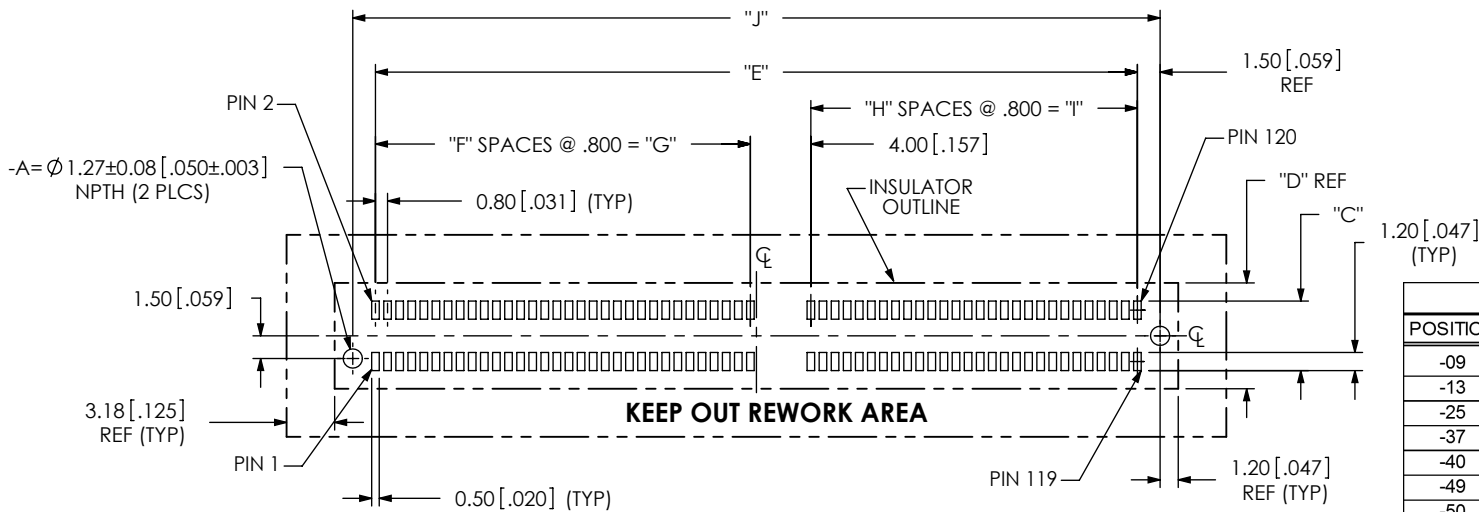


FIG 2
-60 POSITION SHOWN
USE FOR **09, -13, -25, -37, -40, -49, -50, -60, -70, -80, -90, & -100 POSITIONS WITH -A OPTION
****09 OPTION ONLY AVAILABLE IN -L2**

POSITION	"E"	"F"	"G"	"H"	"I"	"J"
-09	9.60[.378]	3	2.40[.094]	4	3.20[.126]	N/A
-13	12.80[.504]	5	4.00[.157]	6	4.80[.189]	15.80[.622]
-25	22.40[.882]	5	4.00[.157]	18	14.40[.567]	25.40[1.000]
-37	32.00[1.260]	20	16.00[.630]	15	12.00[.472]	35.00[1.378]
-40	34.40[1.354]	21	16.80[.661]	17	13.60[.535]	37.40[1.472]
-49	41.60[1.654]	26	20.80[.819]	21	16.80[.661]	44.60[1.756]
-50	42.40[1.669]	26	20.80[.819]	22	17.60[.693]	45.40[1.787]
-60	50.40[1.984]	31	24.80[.976]	27	21.60[.850]	53.40[2.102]
-70	58.40[2.299]	31	24.80[.976]	37	29.60[1.165]	61.40[2.417]
-80	66.40[2.614]	31	24.80[.976]	47	37.60[1.480]	69.40[2.732]
-90	74.40[2.929]	31	24.80[.976]	57	45.60[1.795]	77.40[3.047]
-100	82.40[3.244]	31	24.80[.976]	67	53.60[2.110]	85.40[3.362]

NOTES

1. POSITIONS -09, -13, -25, -37 & -49 ONLY AVAILABLE WITH -01 CARD THICKNESS.
2. POSITIONS -70, -80, -90 & -100 ONLY AVAILABLE WITH -01 & -03 CARD THICKNESS.

TOLERANCES ARE:
DECIMALS
X: ± .3[.01]
XX: ± .10[.004]
XXX: ± .05[.0020]

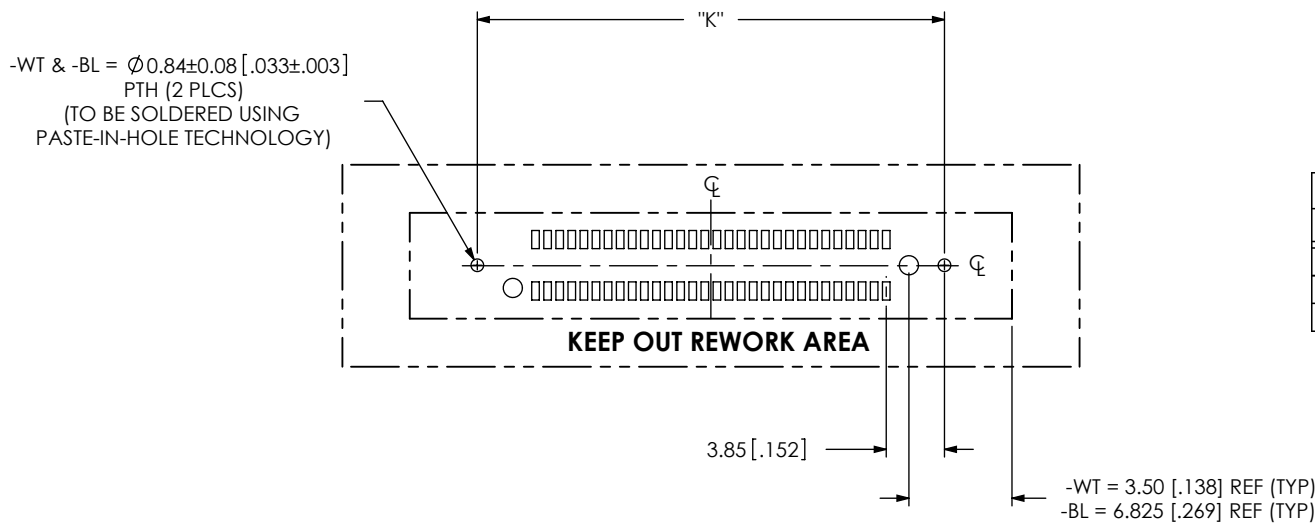
ANGLES
2°

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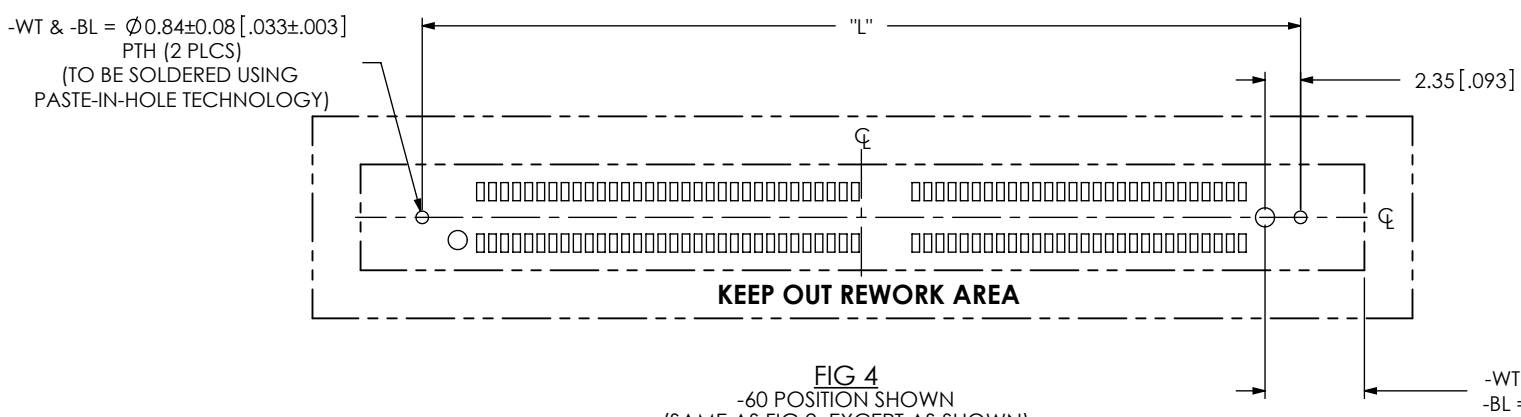


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POSITION	"K"
-10	14.90 [.587]
-20	22.90 [.902]
-30	30.90 [1.220]

FIG 3
 -30 POSITION SHOWN
 (SAME AS FIG 1, EXCEPT AS SHOWN)
USE FOR -10, -20 OR -30 POSITIONS WITH -WT & -BL OPTION
-BL TYPE ONLY AVAILABLE WITH -01 CARD
-WT TYPE ONLY AVAILABLE WITH -01 & -03 CARD



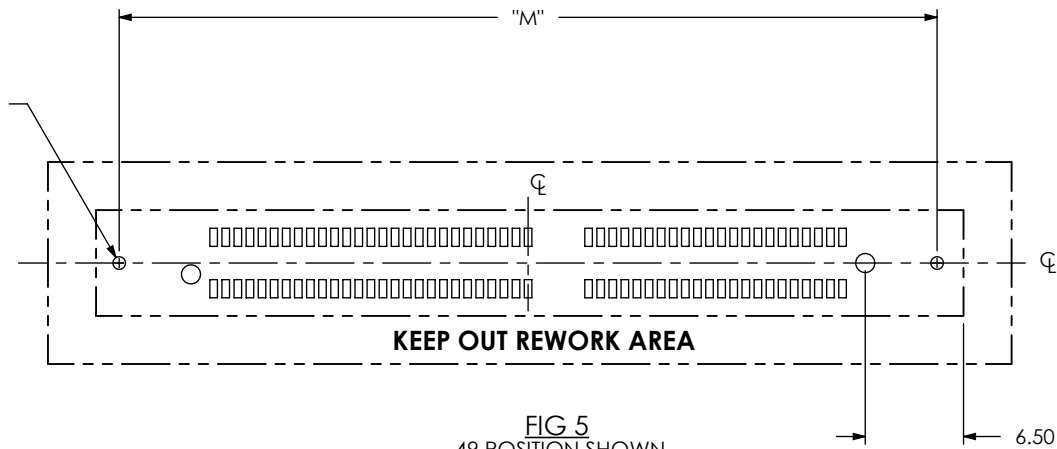
POSITION	"L"
-09	17.30 [0.681]
-13	20.50 [0.807]
-25	30.10 [1.185]
-37	39.70 [1.563]
-40	42.10 [1.657]
-49	49.30 [1.941]
-50	50.10 [1.972]
-60	58.10 [2.287]
-70	66.10 [2.602]
-80	74.10 [2.917]
-90	82.10 [3.232]
-100	90.10 [3.547]

FIG 4
 -60 POSITION SHOWN
 (SAME AS FIG 2, EXCEPT AS SHOWN)
USE FOR -09, -13, -25, -37, -40, -49, -50, -60, -70, -80, -90 & -100 POSITIONS WITH -WT & -BL OPTION
-BL TYPE ONLY AVAILABLE WITH -01 CARD
-WT TYPE ONLY AVAILABLE WITH -01 & -03 CARD

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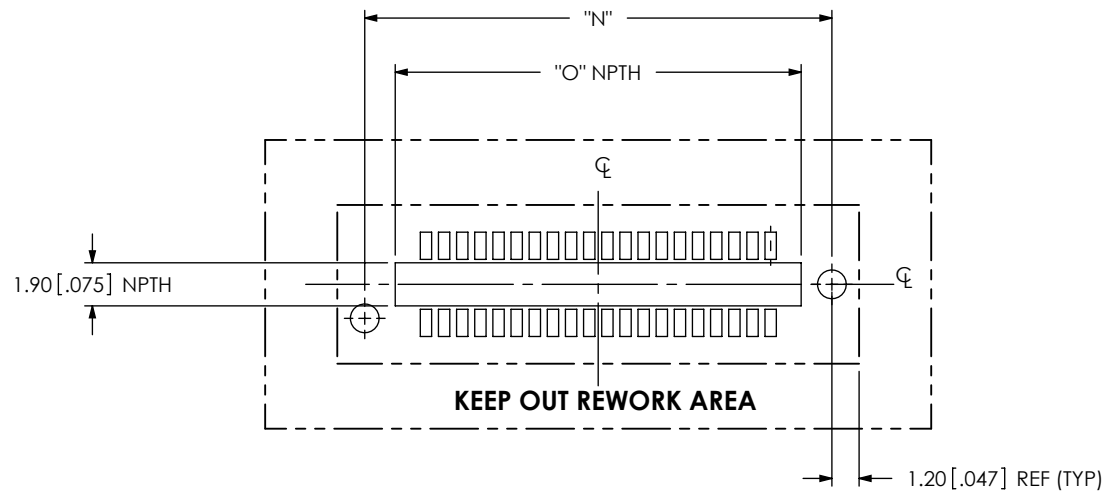
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-L = $\varnothing 0.84 \pm 0.08$ [.033 \pm .003]
 PTH (2 PLCS)
 (TO BE SOLDERED USING
 PASTE-IN-HOLE TECHNOLOGY)



POSITION	"M"
-13	25.30 [0.996]
-25	34.90 [1.374]
-37	44.50 [1.752]
-49	54.10 [2.130]

FIG 5
 -49 POSITION SHOWN
 (SAME AS FIG 2, EXCEPT AS SHOWN)
USE FOR -13, -25, -37 & -49 POSITIONS WITH -L OPTION
-L TYPE ONLY AVAILABLE WITH -01 CARD



POSITION	"N"	"O"
-10	12.60 [0.496]	9.90 [0.390]
-13	15.00 [0.591]	12.30 [0.484]
-20	20.60 [0.811]	17.90 [0.705]

FIG 6
 -20 POSITION SHOWN
 (SAME AS FIG 1, EXCEPT AS SHOWN)
USE FOR -10, 13, OR -20 POSITIONS WITH -PE OPTION
-PE TYPE ONLY AVAILABLE WITH -01 CARD

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POSITION	"P"	"Q"
-09	18.29 [0.720]	15.79 [0.622]
-13	21.49 [0.846]	18.99 [0.748]
-25	31.09 [1.224]	28.59 [1.126]
-49	50.29 [1.980]	47.79 [1.881]

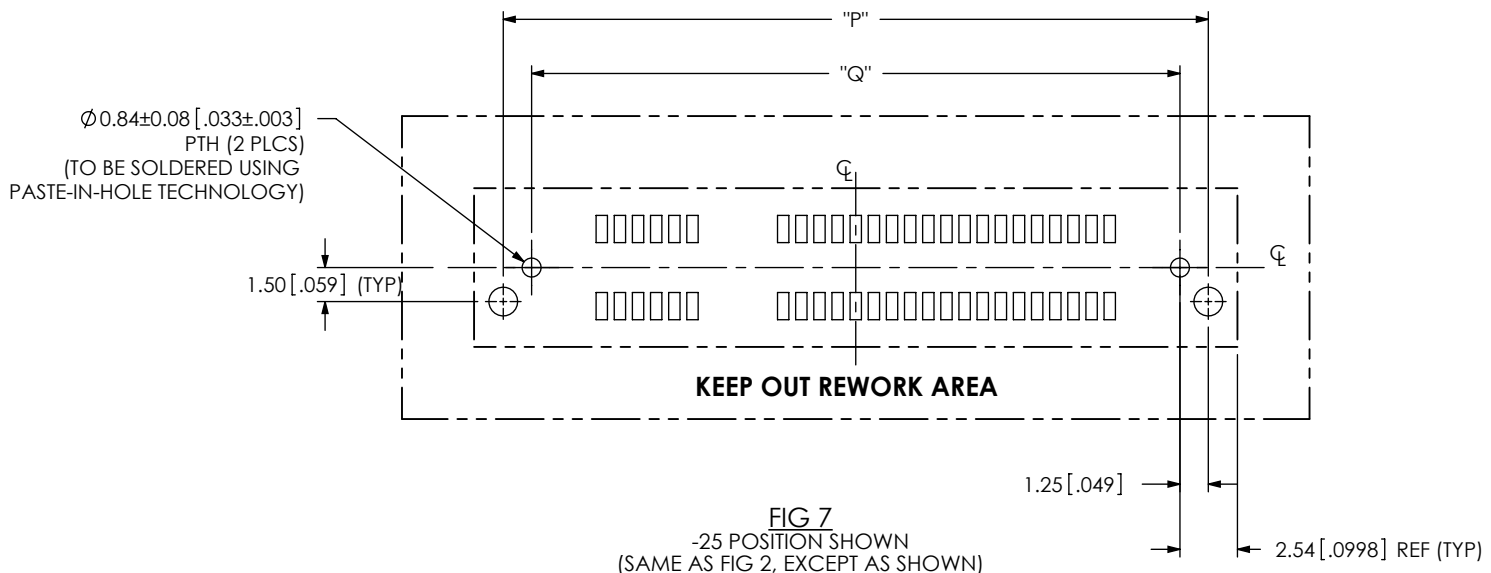


FIG 7
 -25 POSITION SHOWN
 (SAME AS FIG 2, EXCEPT AS SHOWN)
USE FOR -09, -13, -25, OR -49 POSITIONS WITH -L2 OPTION
-L2 TYPE ONLY AVAILABLE WITH -01 CARD

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NOTE: STENCIL TO BE 0.15[.006] THICK.

TABLE 9	
POSITION	"R"
-13	25.30 [.504]
-25	34.90 [1.374]
-37	44.50[1.752]
-49	54.10 [2.130]

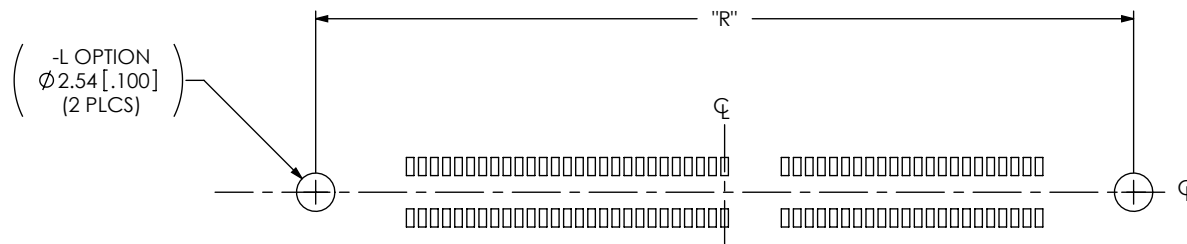
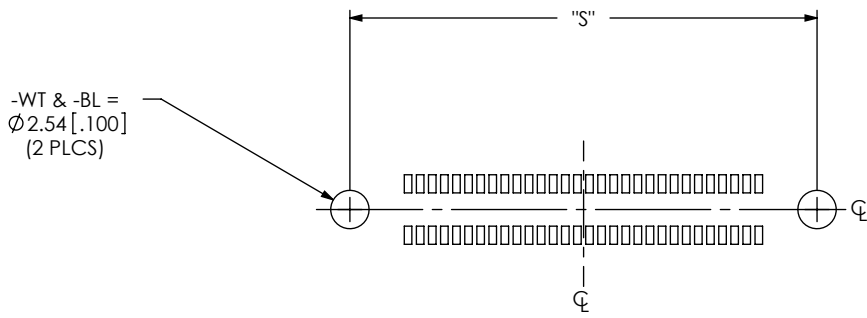


FIG 8
 -49 POSITION SHOWN
 (SAME AS FIG 2, EXCEPT AS SHOWN)
USE FOR -13, -25, -37 & -49 POSITIONS
-L TYPE ONLY AVAILABLE WITH -01 CARD

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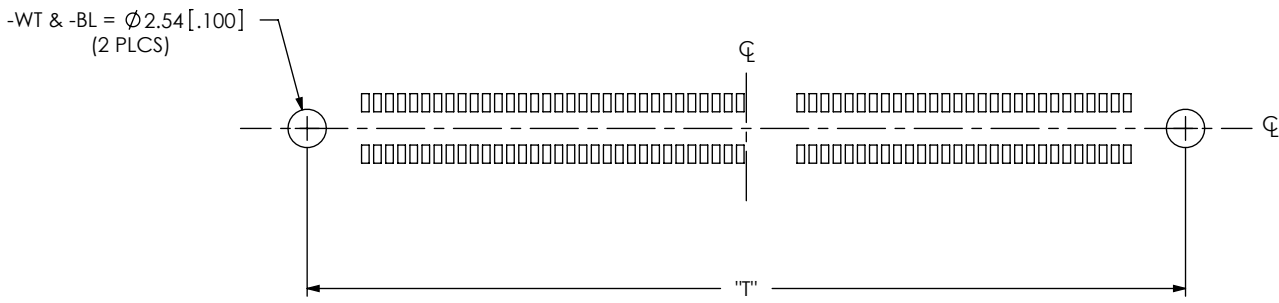
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NOTE: STENCIL TO BE 0.15[.006] THICK.



POSITION	"S"
-10	14.90[.587]
-20	22.90[.902]
-30	30.90[1.217]

FIG 9
 -30 POSITION SHOWN
 (SAME AS FIG 1, EXCEPT AS SHOWN)
USE FOR -10, -20 OR -30 POSITIONS WITH -WT & -BL OPTION
-BL TYPE ONLY AVAILABLE WITH -01 CARD
-WT TYPE ONLY AVAILABLE WITH -01 & -03 CARD



POSITION	"T"
-09	17.30 [0.681]
-13	20.50 [0.807]
-25	30.10 [1.185]
-37	39.70 [1.563]
-40	42.10 [1.657]
-49	49.30 [1.941]
-50	50.10 [1.972]
-60	58.10 [2.287]
-70	66.10 [2.602]
-80	74.10 [2.917]
-90	82.10 [3.232]
-100	90.10 [3.547]

FIG 10
 -60 POSITION SHOWN
 (SAME AS FIG 2, EXCEPT AS SHOWN)
USE FOR -09, -13, -25, -37, -40, -49, -50, -60, -70, -80, -90 & -100 POSITIONS WITH -WT & -BL OPTION
-BL TYPE ONLY AVAILABLE WITH -01 CARD
-WT TYPE ONLY AVAILABLE WITH -01 & -03 CARD

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NOTE: STENCIL TO BE 0.15[.006] THICK.

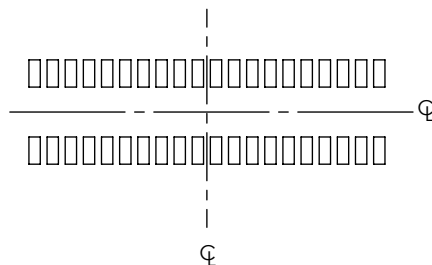


FIG 11
 -20 POSITION SHOWN
 (SAME AS FIG 1, EXCEPT AS SHOWN)
USE FOR -10, 13, OR -20 POSITIONS WITH -PE OPTION
-PE TYPE ONLY AVAILABLE WITH -01 CARD

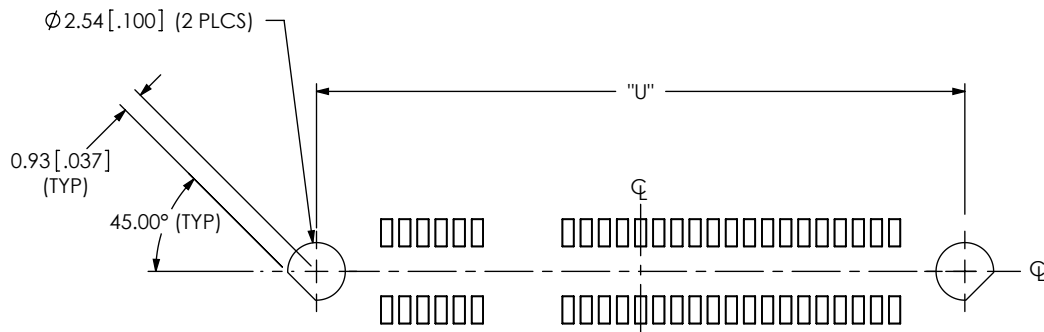


FIG 12
 -25 POSITION SHOWN
 (SAME AS FIG 2, EXCEPT AS SHOWN)
USE FOR -09, -13, -25, OR -49 POSITIONS WITH -L2 OPTION
-L2 TYPE ONLY AVAILABLE WITH -01 CARD

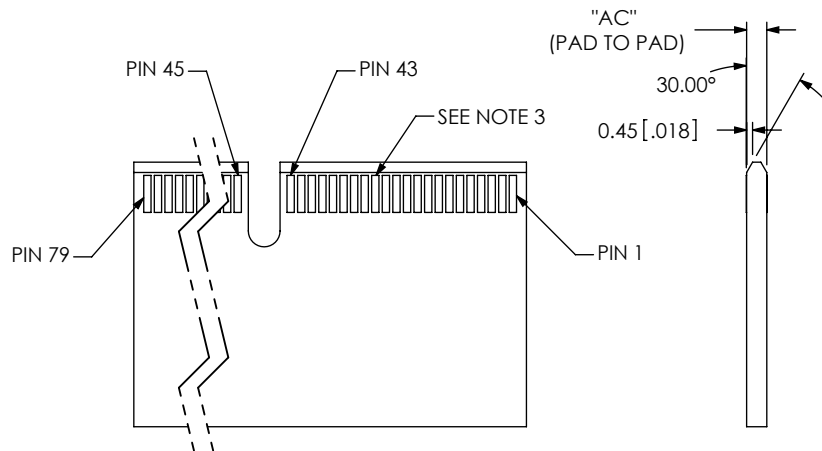
POSITION	"U"
-09	15.79 [0.622]
-13	18.99 [0.748]
-25	28.59 [1.126]
-49	47.79 [1.881]

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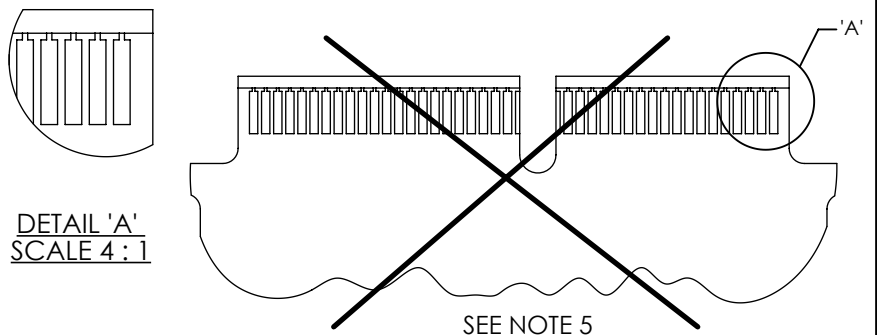
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AH

TABLE 13

POSITION	"V"	"W"	"X"	"Y"	"Z"	"AA"	"AB"
-09	9.60 [0.378]	3	2.40 [0.094]	11.65 [0.459]	4.40 [0.173]	20.65 [0.813]	16.65 [0.656]
-10	7.20 [0.283]	N/A	N/A	9.25 [0.364]	N/A	18.25 [0.719]	14.25 [0.561]
-13	12.80 [0.504]	5	4.00 [0.157]	14.85 [0.585]	6.00 [0.236]	23.85 [0.939]	19.85 [0.781]
-20	15.20 [0.598]	N/A	N/A	17.25 [0.679]	N/A	26.25 [1.033]	22.25 [0.876]
-25	22.40 [0.882]	5	4.00 [0.157]	24.45 [0.963]	6.00 [0.236]	33.45 [1.317]	29.45 [1.159]
-30	23.20 [0.913]	N/A	N/A	25.25 [0.994]	N/A	34.25 [1.348]	30.25 [1.191]
-37	32.00 [1.260]	20	16.00 [0.630]	34.05 [1.341]	18.00 [0.709]	43.05 [1.695]	39.05 [1.537]
-40	34.40 [1.354]	21	16.80 [0.661]	36.45 [1.435]	18.80 [0.740]	45.45 [1.789]	41.45 [1.632]
-49	41.60 [1.638]	26	20.80 [0.819]	43.65 [1.719]	22.80 [0.898]	52.65 [2.073]	48.65 [1.915]
-50	42.40 [1.669]	26	20.80 [0.819]	44.45 [1.750]	22.80 [0.898]	53.45 [2.104]	49.45 [1.947]
-60	50.40 [1.984]	31	24.80 [0.976]	52.45 [2.065]	26.80 [1.055]	61.45 [2.419]	57.45 [2.262]
-70	58.40 [2.299]	31	24.80 [0.976]	60.45 [2.380]	26.80 [1.055]	69.45 [2.734]	65.45 [2.577]
-80	66.40 [2.614]	31	24.80 [0.976]	68.45 [2.695]	26.80 [1.055]	77.45 [3.049]	73.45 [2.892]
-90	74.40 [2.929]	31	24.80 [0.976]	76.45 [3.010]	26.80 [1.055]	85.45 [3.364]	81.45 [3.207]
-100	82.40 [3.244]	31	24.80 [0.976]	84.45 [3.325]	26.80 [1.055]	93.45 [3.679]	89.45 [3.522]

TABLE 14

MATING CARD THICKNESS TYPE	"AC"
-01	1.570 [0.062] ± 0.157 [0.0062]
-02	2.000 [0.079] ± 0.157 [0.0062]
-03	2.360 [0.093] ± 0.157 [0.0062]
*-04	3.180 [0.125] ± 0.157 [0.0062]

*= NOT TOOLED

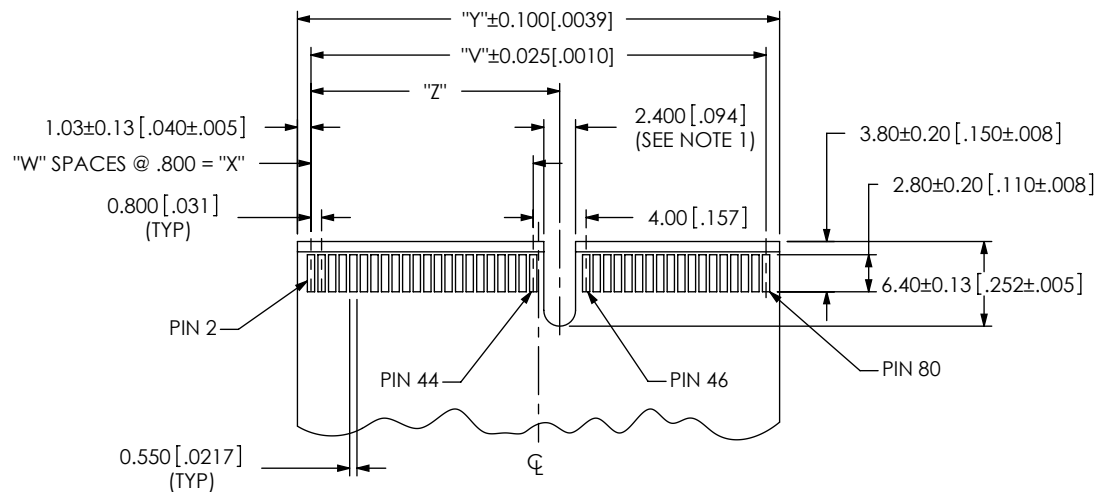


FIG 13
-40 POSITION SHOWN

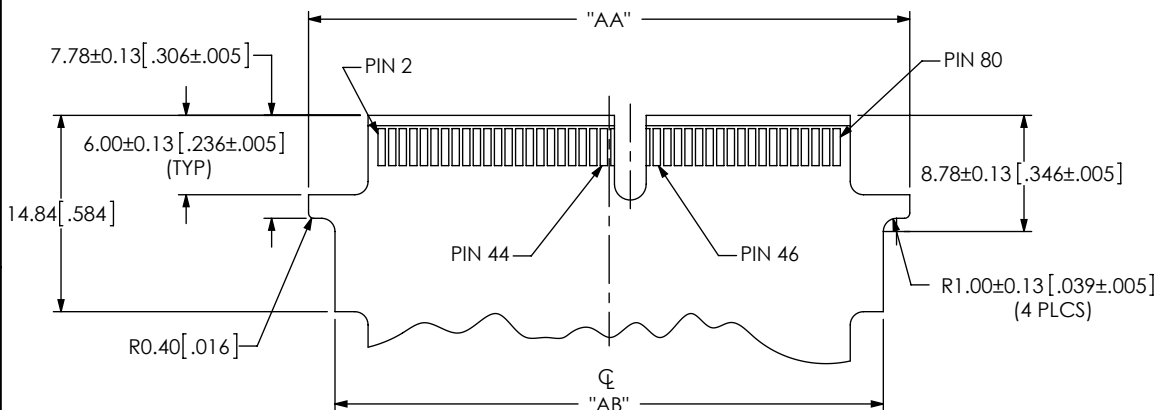


FIG 14
-40 POSITION WITH -BL OPTION SHOWN
(SAME AS FIG 13, EXCEPT AS SHOWN)

NOTES:

1. -10, -20 AND -30 CARDS HAVE NO SLOT.
2. ALL DIMENSIONS ARE SYMMETRIC ABOUT THE CENTERLINE.
3. PLATING TO BE .000030 INCHES GOLD WITH A HARDNESS OF 130-200 KNOOP PER ASTM B 488 TYPE 2, GRADE C.
4. NOTE DELETED.
5. FOR PROPER CONTACT REGISTRATION, PLATING BUS TIES TO BE THE WIDTH OF THE EDGE FINGER.

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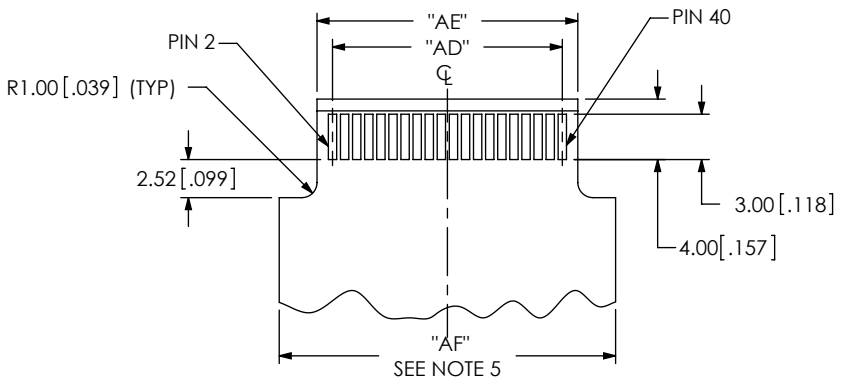


FIG 15
-20 POSITION SHOWN
(SAME AS FIG 13 EXCEPT AS SHOWN)
USE FOR -10, -13, OR -20 POSITIONS WITH -PE OPTION WITH CUTOUTS IN THE BOARD, TOP ENTRY

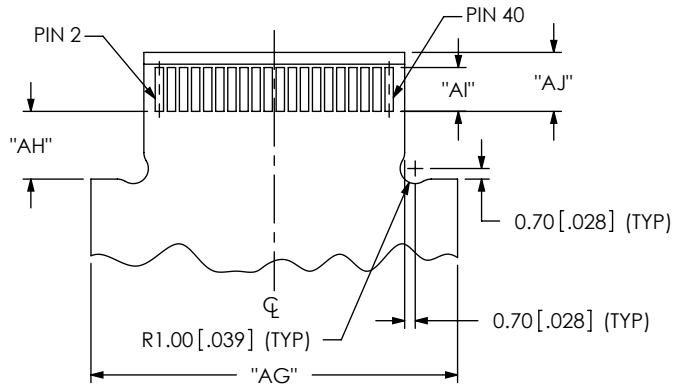


FIG 16
-20 POSITION SHOWN
(SAME AS FIG 15 EXCEPT AS SHOWN)
USE FOR -10, 13, OR -20 POSITIONS WITH -PE OPTION WITH CUTOUTS IN THE BOARD, BOTTOM ENTRY

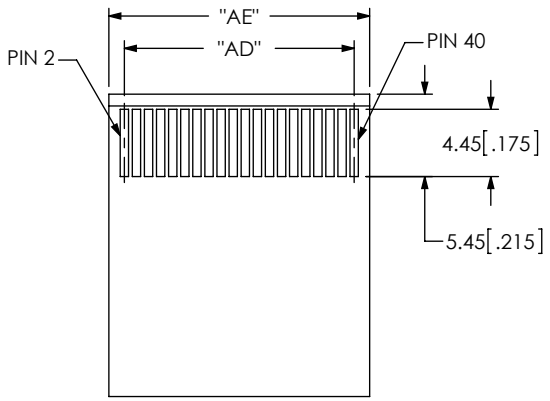


FIG 17
-20 POSITION SHOWN
(SAME AS FIG 13, EXCEPT AS SHOWN)
USE FOR -10, 13, OR -20 POSITIONS WITH -PE OPTION WITHOUT CUTOUTS IN THE BOARD

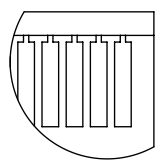
TABLE 16

SUBSTRATE THICKNESS	"AH"	"AI"	"AJ"
1.57 [.062]	4.48 [0.176]	2.90 [0.114]	3.90 [0.154]
2.36 [.093]	5.33 [0.210]	3.05 [0.120]	4.05 [0.159]
3.18 [.125]	6.20 [0.244]	3.20 [0.126]	4.20 [0.165]

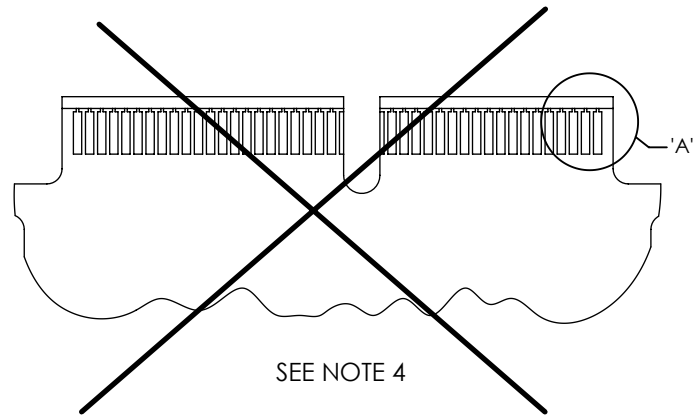
TABLE 15

POSITION	"AD"	"AE"	"AF"	"AG"
-10	7.20 [0.283]	9.25 [0.364]	14.25 [0.561]	16.25 [0.640]
-13	9.60 [0.378]	11.65 [0.459]	16.65 [0.656]	18.65 [0.734]
-20	15.20 [0.598]	17.25 [0.679]	22.25 [0.876]	24.25 [0.955]

- NOTES:
1. ALL DIMENSIONS ARE SYMMETRIC ABOUT THE CENTERLINE.
 2. PLATING TO BE .000030 INCHES GOLD WITH A HARDNESS OF 130-200 KNOOP PER ASTM B 488 TYPE 2, GRADE C.
 3. NOTE DELETED.
 4. FOR PROPER CONTACT REGISTRATION, PLATING BUS TIES TO BE THE WIDTH OF THE EDGE FINGER.
 5. MIN REQUIRED LENGTH.



DETAIL 'A'
SCALE 4 : 1



SEE NOTE 4

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