

Calmark offers the Series 101, 103, 104, 105 Card Extractors for efficient extraction of Printed Circuit Board from connectors and the Series 107 and 108 Card Inserter-Extractor for efficient insertion and extraction of Printed Circuit Board in high density connector contact and multiple connector applications.

FEATURES

- Lever action for safe easy card extraction
- Ample gripping and pushing surfaces for extracting and inserting card
- Available in colors for coding
- Generous area for hot stamp marking
- Exact replacement for other manufacturers

MATERIALS

Series 101, 103, 104, 105 molded in 6/6 Nylon. All Series 107 plastic extractors are molded in Glass Filled (30%) 6/6 or Type 6 Nylon. See table for flammability ratings. UL94-V0 parts are self extinguishing to flame. May be used at 121°C (250°F) continuously. Resistant to alkalis, weak acids, and common solvents.

ROLL PINS

- 2.38 (.094) dia x 6.35 (.250) long Series 101, 103, 104, 105, 107, 107-10, 107-20, 107-20-3, 107-70, 107-70-3
- 2.38 (.094) dia x 7.95 (.313) long Series 107-3, 107-10-3, 107-70-4
- 3.18 (.125) dia x 6.35 (.250) long Series 108
- 1.98 (.076) dia x 7.95 (.313) Series 107-30
- 2.38 (.094) dia x 12.7 (.500) long Series 107-40

COLOR

Other colors available see Part number code. Series 101, 103, 104, 105 standard color is natural/white. Series 107 and 108 standard color is black. For standard colors, a color suffix is not necessary.

HOT STAMPING

Hot stamp marking service is available. Please contact an Application Engineer with your requirements.

SERIES P - PRE-STARTED ASSEMBLY PIN

Calmark offers any of our extractors and inserter-extractors with the option of Pre-Started Assembly Pin.

FEATURES

- Faster and easier installation of extractor to PC card
- Eliminates need for special tools or equipment and set-up time
- Eliminates loss of loose assembly pins

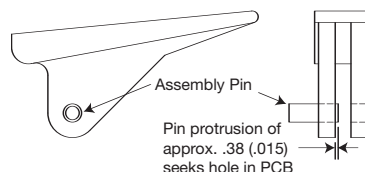


Series 101 to 108 - Plastic Extractors

| Series Part Number | Feature | Board Thickness | Standard Color | UL 94 | Mechanical Advantage | Figures |
|--------------------|---------|-----------------------|----------------|-------|----------------------|----------|
| 101 | E | 1.6 (.063) | natural | V-2 | 3:1 | 1/A |
| V0101 | E | 1.6 (.063) | natural | V-0 | 3:1 | 1/A |
| 103 | E D | 1.6 (.063) | natural | V-2 | 3:1 | 2/A |
| V0103 | E | 1.6 (.063) | natural | V-0 | 3:1 | 2/A |
| 103-3 | E D | 2.4 (.093) | natural | V-2 | 3:1 | 2/A |
| V0103-3 | E | 2.4 (.093) | natural | V-0 | 3:1 | 2/A |
| 104 | E D | 1.6 (.063) | natural | V-2 | 3:1 | 3/A |
| V0104 | E | 1.6 (.063) | natural | V-0 | 3:1 | 3/A |
| 104-3 | E D | 2.4 (.093) | natural | V-2 | 3:1 | 3/A |
| V0104-3 | E | 2.4 (.093) | natural | V-0 | 3:1 | 3/A |
| 105 | E D | 1.6 (.063) | natural | V-2 | 3:1 | 4/A or B |
| V0105 | E | 1.6 (.063) | natural | V-0 | 3:1 | 4/A or B |
| 105-3 | E D | 2.4 (.093) | natural | V-2 | 3:1 | 4/A or B |
| V0105-3 | E | 2.4 (.093) | natural | V-0 | 3:1 | 4/A or B |
| 107 | I E D | 1.6 (.063) | black | V-0 | 4.5:1 | 5/C |
| 107-3 | I E D | 2.4 (.093)/3.2 (.125) | black | V-0 | 4.5:1 | 5/C |
| 107-10 | I E D | 1.6 (.063) | black | V-0 | 3.3:1 | 6/C |
| 107-10-3 | I E D | 2.4 (.093) | black | V-0 | 3.3:1 | 6/C |
| 107-20 | I E L | 1.6 (.063) | black | V-2 | 4.5:1 | 7/D |
| V0107-20 | I E L | 1.6 (.063) | black | V-0 | 4.5:1 | 7/D |
| 107-20-3 | I E L | 2.4 (.093) | black | V-0 | 4.5:1 | 7/D |
| V0107-20-3 | I E L | 2.4 (.093) | black | V-0 | 4.5:1 | 7/D |
| 107-30 | I E | 1.6 (.063) | black | V-0 | 5.5:1 | 8/E |
| 107-40 | I E D | 1.6 (.063) | black | V-0 | 4.5:1 | 9/C |
| 107-40-3 | I E | 2.4 (.093)/2.4 (.125) | black | V-0 | 4.5:1 | 9/C |
| 107-70 | I E L | 1.6 (.063) | black | V-0* | 4.5:1 | 10/D |
| 107-70-3 | I E L | 2.4 (.093) | black | V-0* | 4.5:1 | 10/D |
| 107-70-4 | I E L | 3.2 (.125) | black | V-0* | 4.5:1 | 10/D |
| 108 | I E | 1.6 (.063) | black | V-0 | 4.5:1 | 11/F |

Feature: I = Inserter E = Extractor L = Latching D = meets DSCC 83023
 For Pre-start pin feature, add "P" prefix to part number
 *Main handle portion is UL-94V0, but latch is UL94-V2

For colors other than the standard color, use one of the following suffixes: BLK, BRN, RED, ORG, YEL, GRN, BLU, PRP, GRY or WHT.



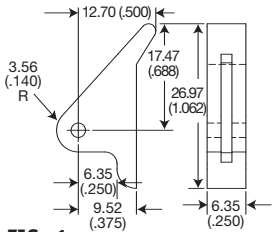


FIG. 1

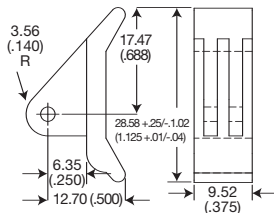


FIG. 2

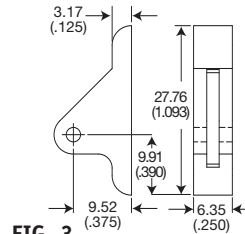


FIG. 3

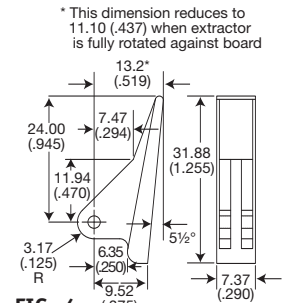


FIG. 4

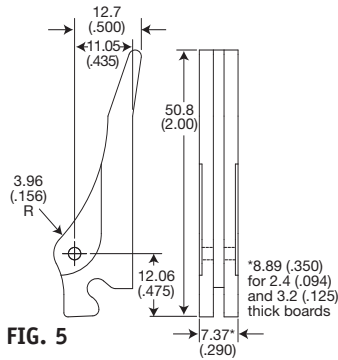


FIG. 5

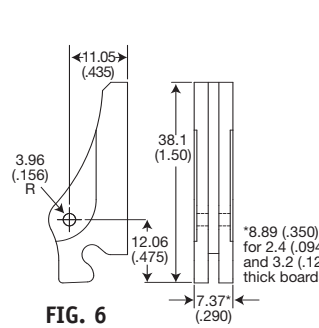


FIG. 6

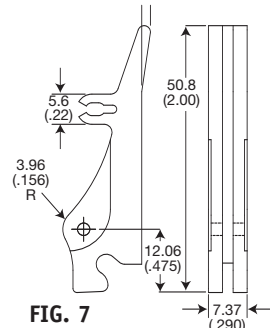


FIG. 7

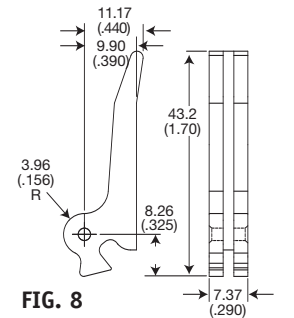


FIG. 8

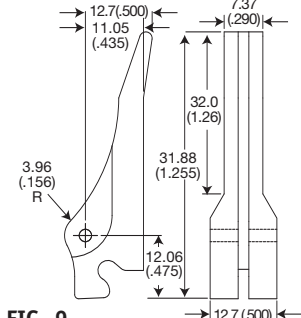


FIG. 9

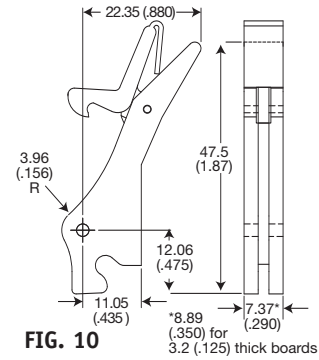


FIG. 10

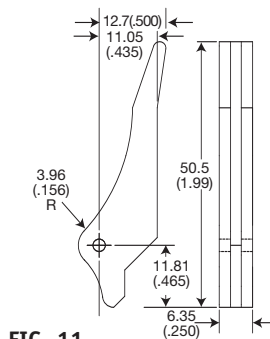


FIG. 11

Units: mm (in)
Unless specified otherwise,
.xx = ± .25, .x = ± .5
(.xxx = ± .010, .xx = ± .02)

APPLICATION DATA

Two inserter or inserter-extractors are recommended per printed circuit board taller than 127 (5) in height.

FIG. A

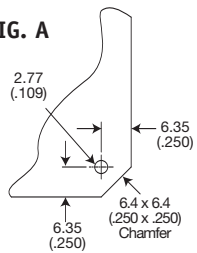
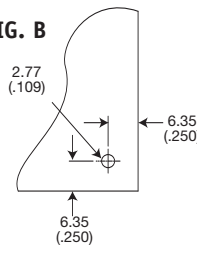
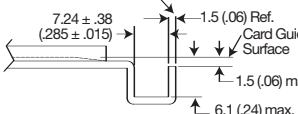


FIG. B



Provides insertion and extraction travel of 8.9 (.35) min.

Nominal position of card edge when seated in connector. The Inserter-Extractor will allow 1.3 (.05) overtravel for tolerance take-up.



Detail of Actuating Surfaces Required on Top and Bottom Guide Plates

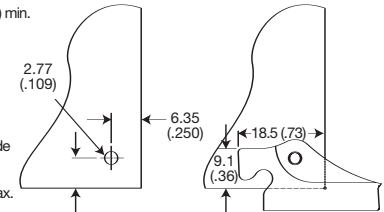
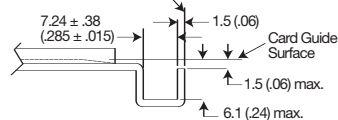


FIG. C

Provides insertion and extraction travel of 8.9 (.35) min.

Nominal position of card edge when seated in connector. The Inserter-Extractor will allow 1.3 (.05) overtravel for tolerance take-up.



Detail of Actuating Surfaces Required on Top and Bottom Guide Plates

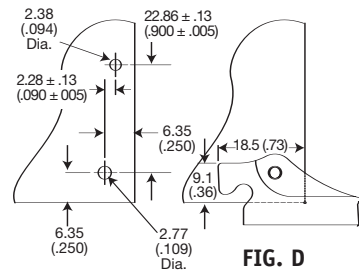
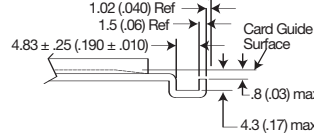


FIG. D

Provides insertion and extraction travel of 8.9 (.35) min.

Nominal position of card edge when seated in connector. The Inserter-Extractor will allow .8 (.03) overtravel for tolerance take-up.



Detail of Actuating Surfaces Required on Top and Bottom Guide Plates

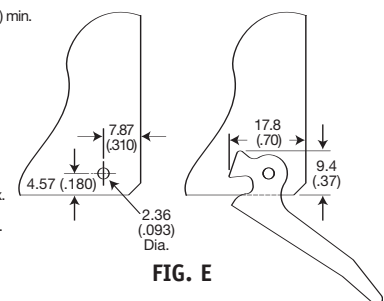


FIG. E

Provides insertion and extraction travel of 8.9 (.35) min.

Nominal position of card edge when seated in connector.

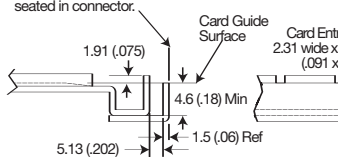
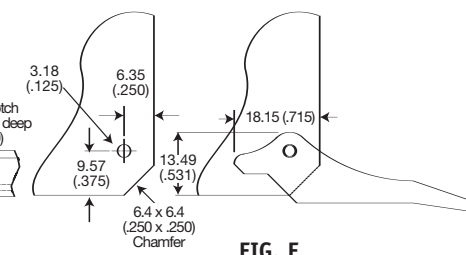


FIG. F



Units: mm (in)
Unless specified otherwise,
.xx = ± .25, .x = ± .5
(.xxx = ± .010, .xx = ± .02)