# CF Radial

# CUT/FORM RADIAL COMPONENTS AT SPEEDS OF 20,000 PPH

Quick-Change Tooling for Capacitors, Transistors, LEDs Snap-In, Stand-Off, Lay-Over or Cut-Only Forms

### VARIETY OF RADIAL CONFIGURATIONS

- Cut-Only Tooling for Precise Lead Protrusion
- Snap-In, Flush-Mount or Stand-Off Forms
- Lay-Over or SMT Reflow Forms

## FLEXIBLE, YET HIGHLY REPEATABLE

- Leads are Clamped Prior to Forming
- Tooling Changes Performed in Minutes
- Custom Trim and Form Tools Available
- Adjustable Cut Length and Stand-Off Height

Form two- or three-lead, taped capacitors, transistors or LEDs at speeds up to 20,000 pph with the **CF Series** Radial System from Manix Manufacturing, Inc.

Different sets of tooling inserts are all that are needed to make the transition from capacitor to transistor to LED forming. Inserts are held in place by two screws, minimizing changeover time from one set-up to another.

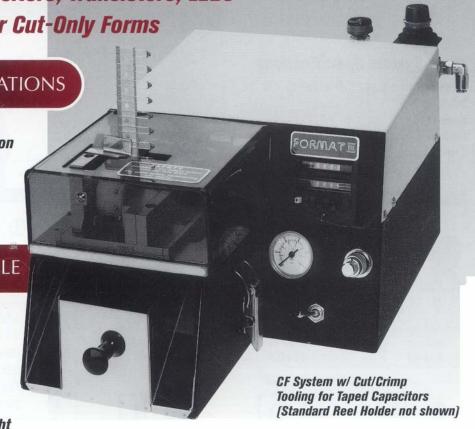
A heavy-duty, pneumatic drive assures reliable performance over

a long operating life. Ruggedly built, CF Series Radial Systems are equipped with an unconditional oneyear warranty.

A wide assortment of tooling inserts are available for a variety of different forms. Our most popular cut-only tooling accurately trims radial component leads to your desired length. TO-92 tooling includes snap-in for part retention, stand-off for uniform body-to-board height, and a reflow form for surface mounting. Form radial capacitors to snap-in, stand-off, and lay-over with MIL-Spec

quality. LEDs can also be formed to snap-in, lay-over or SMT configurations. Flush-mount/lock-in, tooling is also available for electrolytic capacitors. Standard forming dies (snap-in or stand-off) provide a 0.060' cut length below the board and a stand-off height of 0.1 25'. Our new dial-adjustable feeder base quickly changes cut length or stand-off height.

All tooling inserts are manufactured of hardened tool steel to ensure repeatable performance.





The CF Radial System consists of a pneumatically powered base unit and an integrated tape feeder and tool holder mechanism. The tool holder blocks accept the various tooling inserts that dictate the component cut and form configuration. To change from one form to another, the tooling inserts are

easily removed and replaced with inserts for a different form. The drive mechanism delivers taped radial components from the standard reel holder into the form tooling. To prevent lead stress or component damage, tooling sets are designed to clamp leads securely before cutting and forming. A specially designed component

bin separates formed components from tape and lead waste. New dial adjustable tooling allows for quick modification of stand-off height or cut length. To ensure long life and repeatability, all dies are constructed of high-quality tool steel and hardened to 60-

PRINCIPLE OF OPERATION

#### **SPECIFICATIONS**

#### Base System Specifications

12" W x 20" D x 8" H **Dimensions:** 

Weight: 45 pounds

Speed: Up to 20,000 pph

**Utilities:** Requires 80 psi dry shop air Components: Taped capacitors, LEDs, transistors,

or vertical taped resistors

#### Standard Component Forms











Variable Capacitor Snap-In F244D

Toe-In" Capacitor Snap-In F245D

Radial Lay-Over 90° Bend F251D







F247AD

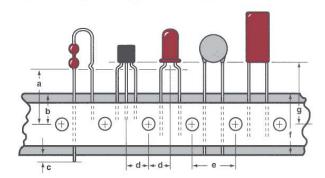


.200" Bolt Circle Transistor Snap-In **F247BD** 



Transistor Stand-Off F249D

#### **Taped Component Specifications**



62 Rockwell.

- .630" ± .020" .443" max. b
- C .086" max.
- d .250" ± .012" .500" ± .012" e
- .709" + .039"/-.020"
- .630" min.
- a height to seating plane (formed leads)
- cut-out length
- c lead protrusion below tape

- 16.00 mm ± 0.5 mm
- 11.00 mm max. 2.18 mm max.
- 6.35 mm ± 0.3 mm
- 12.70 mm ± 0.3 mm
- 18.00 mm +1.0/-0.5 mm 16.00 mm min.
- d component centering
- e sprocket hole pitch
- f carrier tape width
- g seating plane (taped leads)

#### ORDERING INFORMATION

CF-11101: Pneumatic Base System. CF-21313: Deluxe Reel Holder. CF-21340: Taped Radial Feeder. F244D: Variable Capacitor Snap-In Tooling.

F245D: "Toe-In" Capacitor Snap-In Tooling. F246D: Radial Cut-Only Tooling.

F247AD: In-Line Transistor Snap-In Tooling. F247BD: .200" Transistor Snap-In Tooling.

F249D: Transistor Stand-Off Tooling. F251D: Radial Lay-Over Tooling.



The popular CF Series is the only lead former available today that can process both axials and radials with minimal tooling changes. Optional tooling for axial components includes:

CF-21307: Axial Tape Feeder. CF-21308: Axial Loose Feeder. DDJ-1: Light Duty 90 Deg. Tooling. DDJ-1HVC: Heavy Duty 90 Deg. Tooling. CF-11200: Progressive Axial Tooling.



1650 Loretta Avenue Feasterville, PA 19053 215-953-9797