TECHNICAL DATA

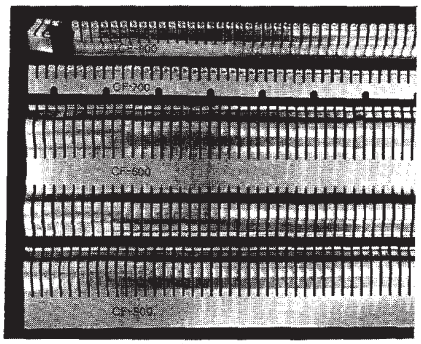
CONTACT FINGER STOCK

CF-100 THROUGH CF-900

CONTACT FINGER STOCK

EIMAC Preformed Finger Stock is a prepared strip of spring material, slotted and formed into a series of fingers, designed to make a sliding contact.

EIMAC Finger Stock provides excellent circuit continuity between components with adjustable or moving contact surfaces. It is especially suitable for making connections to tubes with coaxial terminals or to moving parts, such as long line and cavity circuits. It is also useful as an electrical "weather stripping" around doors in equipment cabinets and "screen" rooms.



The base material is a non-ferrous spring alloy, heat treated for more positive spring action and silver plated for better rf conductivity.

CF-100, CF-700, and CF-800 incorporate "spooned" fingers to prevent scratching the contact surface (see drawings on reverse side of sheet)

EIMAC Contact Finger Stock is supplied in 36-inch lengths (91 cm).

FINGER STOCK CURRENT RATING

	MINIMUM DEFLECTION		MAXIMUM CURRENT		
TYPE	INCH	MM	AMPS. PER FINGER	AMPS. PER INCH OF FINGER STOCK	AMPS. PER CM OF FINGER STOCK
CF-100	.015	(.38)	7.8	47.2	18.7
CF-200	.015	(.38)	7.8	47.2	18.7
CF-300	.025	(.63)	5.7	34.6	13.6
CF-400	.025	(.63)	5.7	34.6	13.6
CF-500	.030	(.76)	7.8	47.2	18.7
CF-600	.030	(.76)	7.8	47.2	18.7
CF-700	.015	(.38)	7.8	47.2	18.7
CF-800	.035	(.89)	6.4	38.7	15.3
CF-900	.015	(.38)	3.9	47.2	18.7

EIMAC Contact Finger Stock is heat treated to a minimum tensile strength of 170,000 pounds per square inch.

No further forming of the material should be attempted. The minimum bending radius of curvature for the material is 0.75 inch. It may be secured by any suitable mechanical means or by soft soldering. If torch-soldering is attempted, extreme care must be exercised to prevent overheating which will anneal the material, resulting in loss of its elastic properties.

EIMAC Contact Finger Stock is available in the following semi-finished states:

CF-101 through CF-901: Slotted and formed (Not heat treated or plated)
CF-102 through CF-902: Slotted, formed, and heat treated (Not plated)
CF-103 through CF-903: Slotted, formed, and plated (Not heat treated)

Contact Finger Stock which has not been heat treated can be formed to different shapes by the user, after which it may be heat treated.

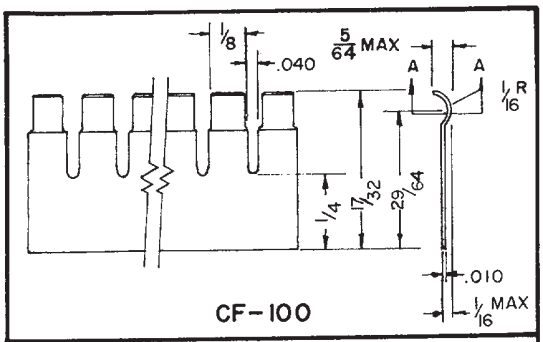
A suitable heat treating schedule consists of holding the unplated material at 600°±5°F for 2.5 hours in air, after which it must be cleaned and plated. Heat treating the material in a controlled atmosphere such as cracked natural gas, disassociated ammonia, or forming gas will minimize oxidation. Finger stock should be held in a suitable jig or fixture during heat treating to prevent deformation.

The Finger Stock current rating is based on a temperature rise of 50°C at the point of contact with one piece of finger stock making contact with another identical piece. Contact pressure is controlled by assuring that the deflection at the point of contact is at least as great as indicated in the table on page 1.

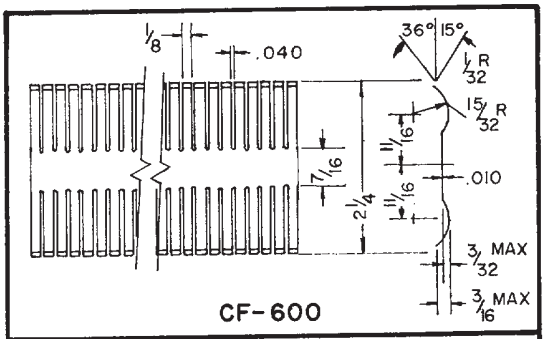
For long term operation the finger stock temperature should not exceed 150°C (300°F). The material may be heated to 260°C (500°F) for a short period such as required for soft soldering.

Temperature rise is proportional to current squared. It will be affected by the temperature of the surface to which contact is made and by the amount and temperature of cooling air if used.

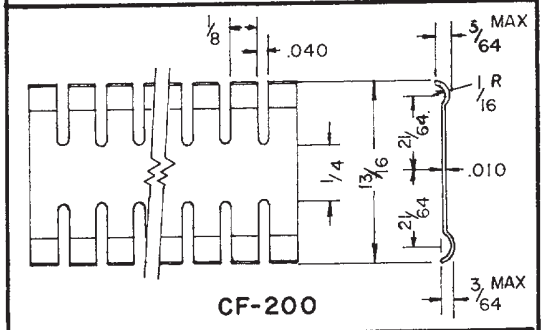
Dimensions in Inches



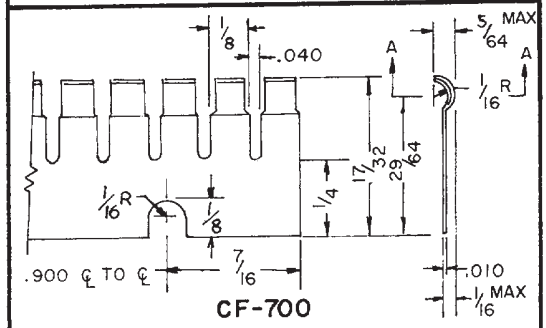
CF-100



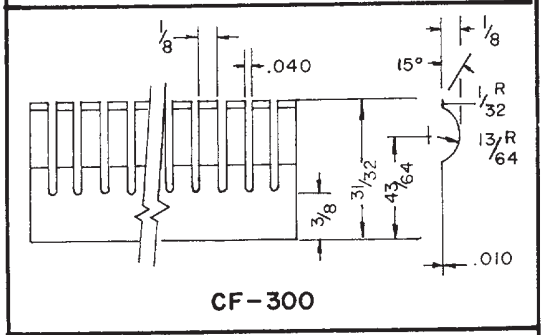
CF-600



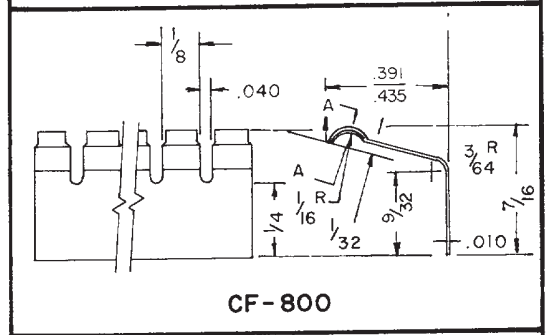
CF-200



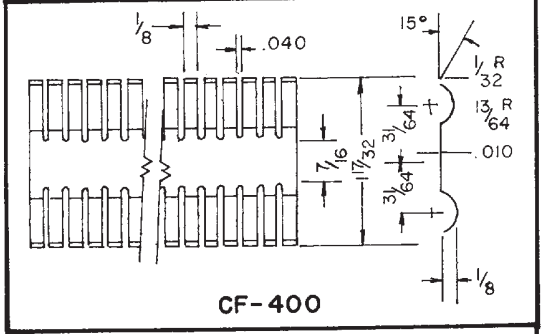
CF-700



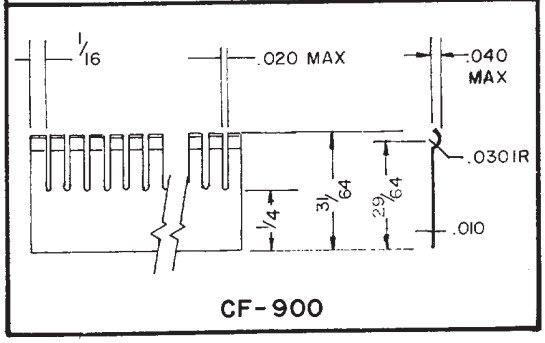
CF-300



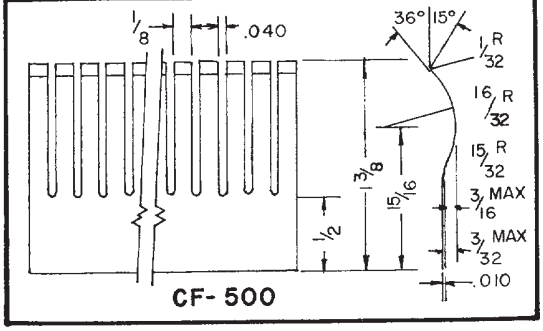
CF-800



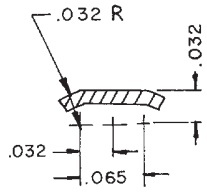
CF-400



CF-900

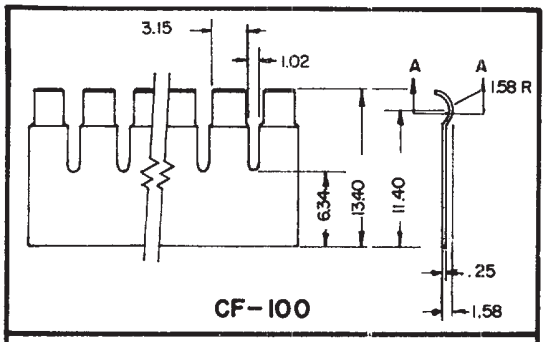


CF-500

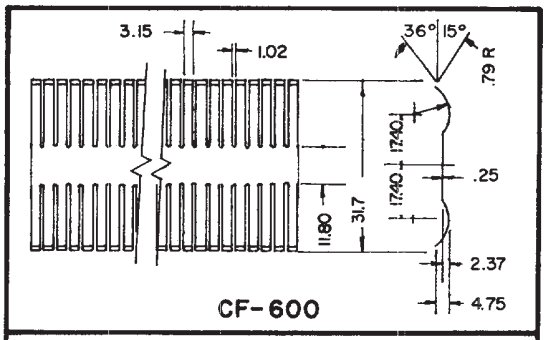


SECTION A-A
(CF 100, 700, 800)

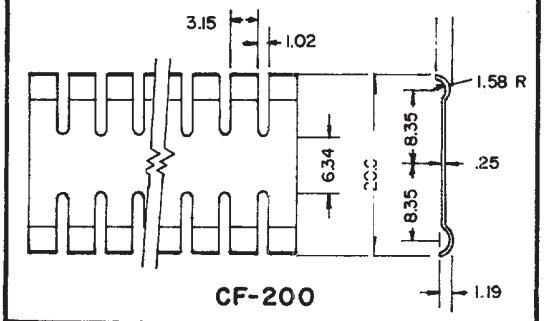
Dimensions in Millimeters



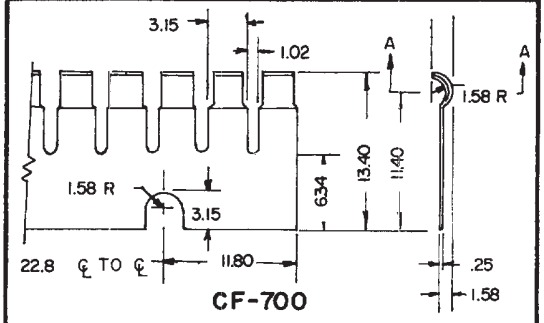
CF-100



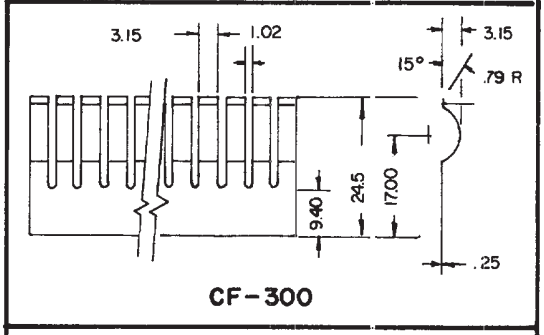
CF-600



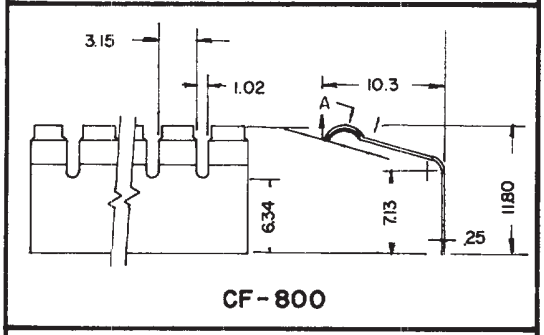
CF-200



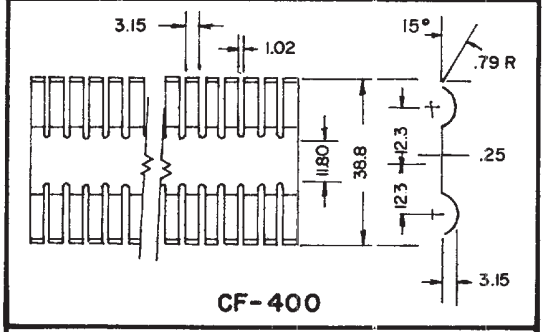
CF-700



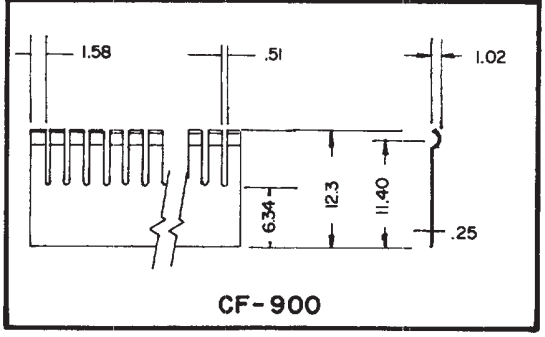
CF-300



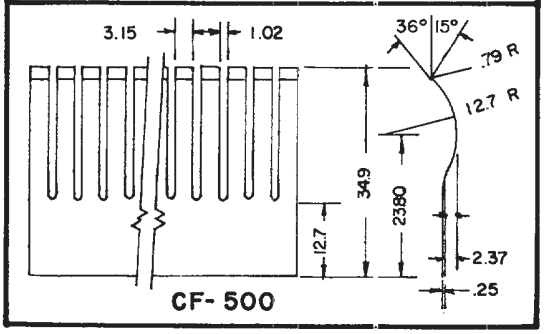
CF-800



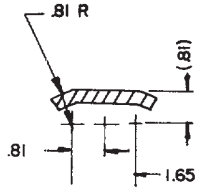
CF-400



CF-900



CF-500



SECTION A-A
(CF 100, 700, 800)