Ohmcraft’s revolutionary fine film, thick film technology, called FineFilm, provides an entirely new level of performance and stability in custom leaded resistor networks.

- Ohmic Values to 2,000 Gigohms
- Tight Ratio Tolerances (to 0.1%)
- Ultra High stability
- Very Low noise
- Low TCR (to 10 ppm/°C)
- Low TCR Tracking (to 5 ppm/°C)
- Low VCR (to 0.05 ppm/Volt)
- Custom Configurations

The usual hybrid technologies for manufacturing resistors depend upon composite materials that have limitations. Traditional thick-film methods severely limit performance characteristics and thin-film methods are limited in attainable ohmic values. The FineFilm method of manufacturing offers the best characteristics of both methods, plus adds many unique features. FineFilm resistors feature a longer, high-aspect ratio trace of lower resistivity film. The combination of long line, high-aspect ratio, and higher conductivity film, give FineFilm resistors unmatched design efficiency, versatility, linearity, stability and low noise. The FineFilm method allows control of process parameters to very tight tolerances. The result is dividers with outstanding tracking performance over a wide range of temperature, voltage and ohmic values.

Using the same method, a complete line of FineFilm surface mount and wire bondable chip resistors are manufactured. For information on those products, please refer to the appropriate data sheets.

Excellent VCR Tracking
The low resistivity composition FineFilm resistors is significantly better than conventional designs. They have a virtually flat VCR over a wide range of values.

Design Flexibility
The long serpentine pattern used in manufacturing FineFilm High Voltage Dividers (HVDs), coupled with the use of low ohms/square thick film inks, makes it possible to create virtually any divider ratio. For example, Ohmcraft has produced 800 meg-ohm dividers with a 20,000:1 ratio. What are your needs?

Low noise, low TCR, low VCR, and many other features add up to the finest leaded divider in the market today.
We would be glad to work with you on your custom network needs:

Because each network is different, there is no standard part number. Each network is assigned its own number as it is received by the factory. To obtain a quote on a network, please contact us. Please include the following information:

- A schematic & physical diagram showing how all of the resistors interconnect.
- The value of each resistor.
- The desired TCR value (ppm/°C)
- Overall tolerance, and the tolerances for each individual component value.
- Type & length of the leads
- Any other information necessary to the manufacture of the network.

Our unique CAD/CAM direct write system allows us to custom fabricate resistor networks:

- Immediate prototyping
- No special tooling
- Easy design changes
- Short or long runs
- High quality

FineFilm technology is based on combining very high aspect ratios, and low film resistivities. This combination is unobtainable using standard methods of manufacturing. The outcome is a resistor that surpasses the parameters that are generally acceptable in the industry. A resistor that has higher stability, lower VCRs, lower noise, and lower TCRs.

For further information, please contact us.