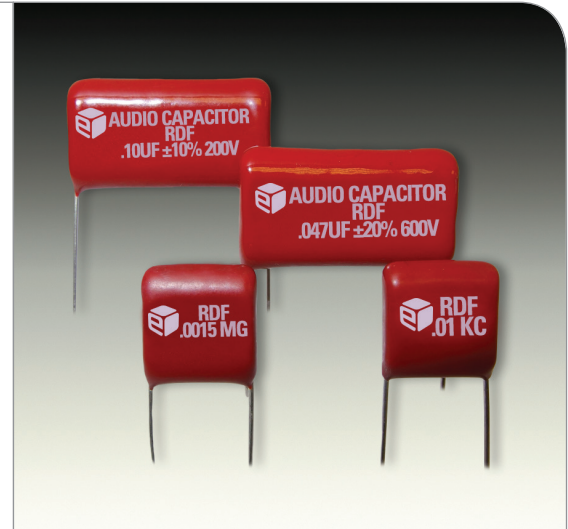
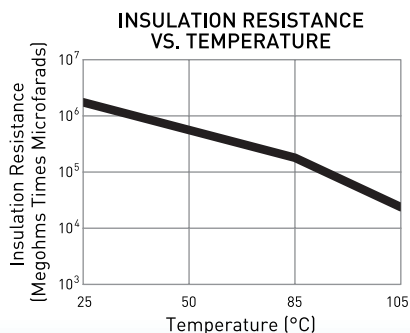
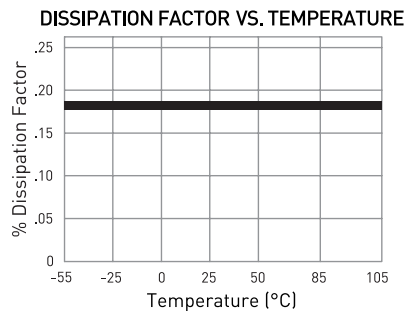
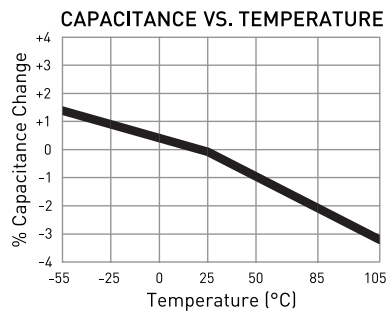


# Polypropylene and Foil RDF Capacitors (Red Drop Epoxy Dip)

The Electrocube audio capacitor RDF Red Drop series includes rugged, non-inductively wound film and foil audio capacitors. Manufactured with proprietary techniques, it offers high frequency operation, high current and low ESR in a miniature rugged package ideal for handling durability. As a result, the RDF capacitor series is able to handle high surge currents without degrading. Audio engineers prefer the RDF series as part of a designated line of audio capacitors specially designed and optimized for high-end audio applications subject to AC and pulsing signals. With high-grade materials, design and manufacturing, these extended foil audio capacitors handle greater current capability, putting them among the best electronics for classic sound on guitars and bass tone in professional, commercial stage and studio use.

## Typical Dielectric Characteristic Curves



## RDF Capacitors

Available in non-inductively wound extended foil construction and standard tin-coated, oxygen-free solid copper leads

## Features

- ■ ■ Tolerances available to  $\pm 5\%$ ,  $\pm 10\%$ ,  $\pm 20\%$
- ■ ■ Epoxy Resin endfills meet or exceed flammability requirements of UL94V0
- ■ ■ Compliance and certification to worldwide and other environmental standards available upon request; available in RoHS construction only
- ■ ■ May be used for frequencies up to 100 KHz
- ■ ■ Applications include audio amplifiers, speakers and musical instruments (i.e., tone and volume control for bass and standard guitars) and other amplifier-capable instruments
- ■ ■ Assorted styles, ratings and customization for unusual requirements necessitated by special circuit applications (including higher IR or lower DF)
- ■ ■ Dimensional variations for all mfd. values available with same volume
- ■ ■ Customizable insulating sleeves, mountings, special terminals, non-standard leads, circuit connections and other hardware

## Specifications

### Temperature range

- Will withstand -40°C to +100°C at rated voltage

### Dielectric voltage test

- Will withstand 200% of DC rated voltage for a period not to exceed 1 minute at temperature of 25°C
- Current limited to 5 mA

### DC life test

- Will withstand 140% of DC rated voltage at 85°C for 250 hours with not more than 1 failure in 12 permitted
- Current limited to 5 mA
- Additional life test details available

### Dissipation factor

- Will not exceed 0.1% at 25°C

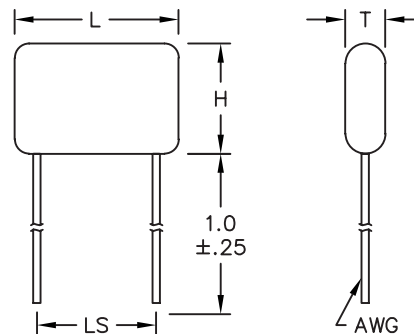
### Dielectric absorption

- Will not exceed 0.1% at 25°C per MIL-C-19978

### Acceptance criteria

- Measurement frequency for capacitance and dissipation factor will be 1,000 Hz

### Oval Epoxy Dip Radial Lead



For max. T, H and L dimensions, allow +.050".

### Pulse Rise Time

| LEAD<br>SPACING | DV/DT (V/μS) |             |             |              |
|-----------------|--------------|-------------|-------------|--------------|
|                 | 200 VOLT DC  | 400 VOLT DC | 600 VOLT DC | 1000 VOLT DC |
| .30             | 6,700        | 9,000       | 14,000      | 18,000       |
| .39             | 4,500        | 7,200       | 11,200      | 16,000       |
| .59             | 3,000        | 4,800       | 7,500       | 12,000       |
| .89             | 1,300        | 2,100       | 3,300       | 5,300        |

| 200 VOLTAGE DC |     |     |      |     |     |  |
|----------------|-----|-----|------|-----|-----|--|
| CAP            | T   | H   | L    | LS  | AWG |  |
| .001           | .20 | .33 | .43  | .30 | 22  |  |
| .0015          | .20 | .35 | .43  | .30 | 22  |  |
| .0022          | .20 | .33 | .43  | .30 | 22  |  |
| .0033          | .20 | .33 | .43  | .30 | 22  |  |
| .0047          | .22 | .35 | .43  | .30 | 22  |  |
| .0068          | .22 | .35 | .43  | .30 | 22  |  |
| .01            | .22 | .35 | .43  | .30 | 22  |  |
| .015           | .24 | .39 | .43  | .30 | 22  |  |
| .022           | .24 | .41 | .51  | .39 | 22  |  |
| .033           | .26 | .43 | .51  | .39 | 22  |  |
| .047           | .30 | .47 | .51  | .39 | 22  |  |
| .068           | .26 | .49 | .71  | .59 | 20  |  |
| .10            | .31 | .59 | .71  | .59 | 20  |  |
| .15            | .37 | .65 | 1.02 | .89 | 20  |  |
| .22            | .33 | .67 | 1.02 | .89 | 20  |  |
| .33            | .37 | .77 | 1.02 | .89 | 20  |  |
| .47            | .45 | .83 | 1.02 | .89 | 20  |  |

| 400 VOLTAGE DC |     |     |      |     |     |  |
|----------------|-----|-----|------|-----|-----|--|
| CAP            | T   | H   | L    | LS  | AWG |  |
| .001           | .20 | .33 | .43  | .30 | 22  |  |
| .0015          | .20 | .35 | .43  | .30 | 22  |  |
| .0022          | .20 | .33 | .43  | .30 | 22  |  |
| .0033          | .20 | .33 | .43  | .30 | 22  |  |
| .0047          | .22 | .35 | .43  | .30 | 22  |  |
| .0068          | .22 | .35 | .43  | .30 | 22  |  |
| .01            | .22 | .35 | .51  | .39 | 22  |  |
| .015           | .22 | .39 | .51  | .39 | 22  |  |
| .022           | .24 | .45 | .51  | .39 | 22  |  |
| .033           | .24 | .49 | .51  | .39 | 22  |  |
| .047           | .31 | .53 | .71  | .59 | 20  |  |
| .068           | .33 | .63 | .71  | .59 | 20  |  |
| .10            | .39 | .71 | .71  | .59 | 20  |  |
| .15            | .35 | .69 | 1.02 | .89 | 20  |  |
| .22            | .47 | .75 | 1.02 | .89 | 20  |  |
| .33            |     |     |      |     |     |  |
| .47            |     |     |      |     |     |  |

| 600 VOLTAGE DC |     |     |      |     |     |  |
|----------------|-----|-----|------|-----|-----|--|
| CAP            | T   | H   | L    | LS  | AWG |  |
| .001           | .20 | .33 | .43  | .30 | 22  |  |
| .0015          | .20 | .33 | .43  | .30 | 22  |  |
| .0022          | .20 | .33 | .43  | .30 | 22  |  |
| .0033          | .21 | .35 | .43  | .30 | 22  |  |
| .0047          | .20 | .37 | .51  | .39 | 22  |  |
| .0068          | .22 | .38 | .51  | .39 | 22  |  |
| .01            | .22 | .39 | .51  | .39 | 22  |  |
| .015           | .26 | .43 | .51  | .39 | 22  |  |
| .022           | .30 | .47 | .51  | .39 | 22  |  |
| .033           | .31 | .53 | .71  | .59 | 20  |  |
| .047           | .35 | .59 | .71  | .59 | 20  |  |
| .068           | .35 | .65 | .71  | .59 | 20  |  |
| .10            | .35 | .69 | 1.02 | .89 | 20  |  |
| .15            |     |     |      |     |     |  |
| .22            |     |     |      |     |     |  |
| .33            |     |     |      |     |     |  |
| .47            |     |     |      |     |     |  |

| 1000 VOLTAGE DC |     |     |      |     |     |  |
|-----------------|-----|-----|------|-----|-----|--|
| CAP             | T   | H   | L    | LS  | AWG |  |
| .001            | .20 | .33 | .43  | .30 | 22  |  |
| .0015           | .20 | .35 | .43  | .30 | 22  |  |
| .0022           | .23 | .41 | .51  | .39 | 22  |  |
| .0033           | .24 | .47 | .51  | .39 | 22  |  |
| .0047           | .30 | .49 | .51  | .39 | 22  |  |
| .0068           | .33 | .57 | .51  | .39 | 22  |  |
| .01             | .26 | .49 | .71  | .59 | 20  |  |
| .015            | .30 | .53 | .71  | .59 | 20  |  |
| .022            | .33 | .63 | .71  | .59 | 20  |  |
| .033            | .39 | .71 | .71  | .59 | 20  |  |
| .047            | .37 | .67 | 1.02 | .89 | 20  |  |
| .068            | .41 | .77 | 1.02 | .89 | 20  |  |
| .10             |     |     |      |     |     |  |
| .15             |     |     |      |     |     |  |
| .22             |     |     |      |     |     |  |
| .33             |     |     |      |     |     |  |
| .47             |     |     |      |     |     |  |

\* Consult factory as sizes may vary

Add tolerance designator to complete part number: J = ±5%, K = ±10%, M = ±20%

For questions and/or a quote, contact Sales at 909-595-4037 or [info@electrocube.com](mailto:info@electrocube.com).



Founded in 1961, Electrocube is one of the most respected design manufacturers of passive electrical components – film capacitors, RC Networks, EMI Filters and foil transformers – for a wide range of standard and custom applications in the aerospace, audio, elevator, heavy equipment industries and more. Electrocube's hallmark is its clear understanding of the challenges faced by design engineers and purchasing agents as well as audio engineers, editors and musicians in the high-end audio industry. [www.electrocube.com](http://www.electrocube.com)