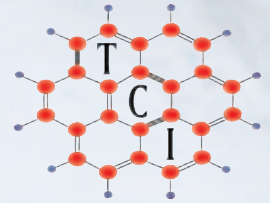


TCl Ceramics, Inc.

Manufacturers of Dielectric, Magnetic, & Advanced Materials



Temperature Compensated Dielectric Materials

TCl Ceramics offers a broad range of state-of-the-art dielectric materials for use as dielectric resonators and substrates. These materials exhibit high dielectric constant, high Q-factor, and a wide range of temperature coefficients to meet the most demanding customer requirements. Our ceramic scientists are recognized industry leaders and pioneers. This, coupled with our high-volume in-house manufacturing capabilities and commitment to quality and value, makes us one of the industry leaders.

Contact TCl Ceramics for all of your temperature compensated dielectric material needs. Our dedicated team of sales professionals, applications engineers, material scientists, and manufacturing personnel will work hard to ensure that all of your needs are met.

Product Overview

DR-30 Series

- Excellent performer suitable for the most demanding applications
- Extremely high Q ($>10,000$ @ 10 GHz; $50,000$ @ 2 GHz typical)
- Tf range of -2 to $+4$ ppm/°C available
- Very linear Tf
- Er ~ 30

DR-36 Series

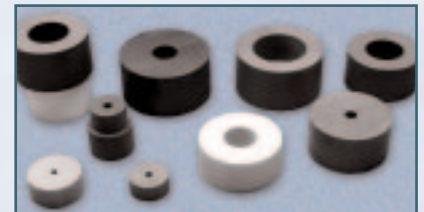
- Good overall performance at an affordable price
- Very high Q ($>10,000$ @ 4 GHz; $35,000$ @ 850 MHz typical)
- Tf range -3 to $+9$ ppm/°C available
- Very linear Tf
- Er ~ 36

DR-45 Series

- Higher Er (~45) for greater circuit miniaturization
- Very high Q ($> 10,000$ @ 4 GHz; $35,000$ @ 850 MHz typical)
- Tf range of -3 to $+9$ ppm/°C available

DR-80 Series

- Extremely high Er (~80) for the highest degree of circuit miniaturization
- High Q (> 3000 @ 3 GHz)
- Tf range -3 to $+9$ ppm/°C available



Additional custom temperature-stable dielectric materials with Er values from 10-100, as well as Alumina supports, are available upon request. Consult the factory for additional information.

TCl Ceramics, Inc.

Sales, Manufacturing, and Engineering

1210 Win Dr., Bethlehem, PA 18017
Ph: 610-867-7600 Fax: 610-867-0200



Manufacturing and Engineering

18450 Showalter Rd., Hagerstown, MD 21742
Ph: 301-766-0560 Fax: 301-766-0566
E-mail: sales@tciceramics.com
www.tciceramics.com



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