



## Frequently Asked Questions

### *T528 Series* - KEMET *F*ace *D*own Termination *O*rganic Polymer Capacitor

**1. What are the differences between T528 Face Down Organic and the standard organic polymer (T520) series?**

Electrically, the T528Z case has a lower inductance ( $< 0.7\text{nH}$ ) than a standard T520V part type (2.2nH typical). In addition, the new T528 Face Down Z case (7343-17) has terminations only on the bottom surface of the component as opposed to the standard wrap around terminations on a T520V case (7343-19). The T528Z requires a different solder pad lay out as well. Details on the three pad layout can be found in the complete product specification.

**2. How can I order samples of these parts?**

You can order samples through the normal channels for these parts. Orders can be placed directly through KEMET and the ETBF system (Easy to Buy From) or through your local, authorized KEMET distributor.

**3. What is the operating temperature for this series?**

The T528 series is rated for use at  $-55^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$ .

**4. What ESR ratings are available and how do I specify when ordering?**

With the initial launch, a 330 microfarad, 2.5 volt device is available in two different ESR levels: 12 and 9 milliOhms. You specify ESR with the last 4 digits of the part number. Details on ordering information can be found in the complete product specification.

**5. What applications need a low inductance, low ESR part?**

The initial offerings are targeted for high speed server and microprocessor decoupling where designs are driving the demand for low ESR and low inductance chips.

**6. What leadframe termination options are available for the T528 series?**

For the initial release, the T = 100% Matte tin termination is available.

**7. Where is the T528 series manufactured?**

The T528 series is currently manufactured in our Simpsonville, SC headquarters plant. This is the location of our Innovation Center and Advanced Manufacturing Facilities.

**8. What is the lead time for this series?**

Current lead times are from nine weeks.

**9. What packaging options are available?**

The T528 series is available in tape and reel packaging. You can order this product in 7" or 13" reels.

**10. What type of voltage derating is required for this series?**

The T528Z series requires no derating for temperature. KEMET recommends a 10% application voltage derating for part types  $\leq 10\text{volts}$ . In other words, part types with a rated voltage of 10 volts or less can be used to up to 90% of their rated voltage.