

# **Restriction of Hazardous Substances (RoHS)**

## **TTE Filters offers RoHS Compliant and Lead Free Alternatives**

#### Overview

In its ongoing commitment in supplying superior quality products to the magnetics industry and meeting worldwide environmental regulations, TTE Filters now offers RoHS compliant components produced in accordance with the RoHS-2 2011/65/EU and RoHS 3 Directive (EU) 2015/863 European Parliament Restriction of Hazardous Substances Directive banning the use of lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), polybrominated diphenyl ethers (PBDE), Bis (2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP), and Disobutyl phthalate (DIBP). Currently TTE uses only "lead solder alloys" in its products and does not plan to introduce any of the remaining banned substances into the future release of any new products.

### TTE's Definition of a "Lead Free Component"

TTE defines a lead free component as one that is produced with a true 100% lead free solder alloy on both the internal joint connections and external lead finishes of the component. Note: TTE Filters does not claim the exemptoin outlined in paragraph 7 of the Annex table allowing a solder alloy of 85% lead or greater to be used in its lead free products. Please refer to the EU Directive for further information.

### TTE's Definition of a RoHS compliant Component

TTE defines and RoHS component the same as its Lead Free component. A lead free component can be considered as being RoHS compliant by meeting the 0.10% of the homogeneous material of the device requirement and in addition is also compatible with 260°C soldering processes; verified through internal product testing.

#### **RoHS & Lead Free Marking**

RoHS & Lead Free products will be identified using an "R" within the part number; for example: KB6R-10M-5P-50-1335. All bulk and outer container labels will be identified in accordance with JESD97 marking standard for lead free products as shown.

#### Lead Free Solder Type

TTE has selected 3 types of Lead Free solder alloys dependent on product style. Please consult factory for specific type when placing order.

#### Ordering

When ordering RoHS/Lead Free products, the "R" must be assigned within the part number and identified on the purchase order.

#### **Availability**

RoHS/Lead Free products are currently available upon request. Email TTE sales at <u>tte@tte.com</u> or contact a customer service representative for details at (USA) +1-716-532-2234.

## Gowanda BTI, LLC

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