# **Riedon FAQ's**

### 1) Are Riedon Standard Resistors RoHS Compliant?

Yes. See here for our full statement:

riedon.com/media/pdf-tech/Riedon\_RoHS\_Statement\_(current).pdf Riedon also has the capability to produce non-RoHS compliant products.

# 2) Can Riedon perform full qualification tests(screening or conditioning) prior to shipping?

Riedon can perform screening to most Military Standards and meet custom customer requirements upon request.

### 3) Are Riedon resistors Mil-Spec applicable?

Riedon parts are built to the Mil-Spec standards but are not maintained on the US QPL. Our resistors are commercial equivalents.

#### 4) What is the MSL level of Riedon parts?

All Riedon parts are MSL-1 with the exception of our "S" series as it is rated at MSL-2.

### 5) Does Riedon maintain reliability data for their resistors?

Riedon parts are almost exclusively "commercial quality". We do not maintain this data for commercial parts.

### 6) Are samples available?

Samples are available after a sample form is submitted.

Go to: http://riedon.com/sample\_request

### 7) I can't find any pulse information on your data sheet. Why?

Riedon does not publish pulse ratings for its products because pulse rated parts require additional production controls not associated with standard parts. Riedon requests that customers contact the factory for pulse ratings to insure maximum pulse performance.

#### 8) Can standard Riedon components be altered to fit my application?

Yes! Flexibility is a key design feature in Riedon resistors, and we structure our manufacturing processes to support this concept. See here for more information on our capabilities: http://riedon.com/custom-resistors/

# 9) Does Riedon provide tin/lead finish on terminations?

Yes on special customer requests. Our standard tin/lead finish is 60% tin - 40% lead (Pb).

# 10) What is the H.S. Tariff# for Riedon Products?

8533.21.00 - Fixed Resistors, for a Power Handling Capacity Not Exceeding 20W. This number is used for exporting to diffferent countries.

#### 11) Does Riedon have a Conflict Mineral policy?

Yes. See here for our full statement:

riedon.com/media/pdf-tech/Riedon\_Conflict\_Minerals\_POLICY\_Jan\_2014.pdf Riedon can also supply current Conflict Minerals CMRT Templates upon request.

# 12) Does Riedon offer any type of expedited delivery?

Riedon offers Premium Delivery that allows customers to receive orders with expedited delivery(depending on the part) for an additional charge. Contact the factory for specific requests.

# 13) Does Riedon offer High Precision parts (low ohm & tight tolerance)?

Riedon offers ohmic values as low as 0.0005 ohm and as tight as 0.005%.

#### 14) What is Riedon's ECCN code?

EAR99

# 15) What if I received my order but it doesn't match your data sheets?

If you receive an order that does not meet the criteria on our data sheet or is damaged, please contact Riedon immediately for an RMA# and further instructions.

#### 16) Can I cancel my order?

All Riedon orders are Non-Cancellable Non-Returnable unless authorized beforehand.

### 17) Does Riedon provide Material Declaration Sheets (MDS)?

This information is available upon request.

# 18) Can Riedon provide the Class-6 IPC form for its parts?

This information is available for most of our products upon request.

#### 19) Can Riedon support bar code labeling on packaging?

Yes. Contact Riedon for customer bar code labeling.

#### 20) Does Riedon offer temperature sensing resistors?

Yes. For more information see here:

riedon.com/media/pdf-tech/Temperature\_Sensing\_Wirewound\_Resistors.pdf

#### 21) Does Riedon carry parts for high temperature applications?

Yes. We build parts that can operate in 300°C and above temperature.

Ex: UT Series (up to 350°C), HVS & CHR Series (up to 300°C), and UAL Series (up to 275°C).

Special products are also available at higher temperature ranges upon request. Contact us for more information.

#### 22) Does Riedon offer anything for High Voltage applications?

Yes. Riedon provides parts that can operate up to 48kV.

Ex: GST Series (up to 6kV), MG Series (up to 10kV), and HTE Series (up to 48kV).

# 23) Does Riedon offer any product for High Power applications?

Yes. Riedon offers parts that can operate up 2.5kW.

Ex: FHR Series (up to 2.5kW), UAL Series (up to 300W), and PF2270 Series (up to 600W)

# 24) Does Riedon offer any low inductance parts?

Yes. Riedon offers non-inductive parts as well as low inductance.

Ex: The UT Series can be made with a non-inductive characteristic, the MT Series has an inductance of <10nH, and the UHPL has an inductance of < 0.08uH.

#### 25) What is the Temperature Coefficient of Resistance (TCR) and how does it affect resistor performance?

This coefficient relates the change in resistance to any change related to a given range of temperatures.

The general equation is:

$$TCR = \frac{R2 - R1}{R1(T2 - T1)} 10^{-6} \\ \begin{array}{c} \text{Example:} & \text{R1 = 100} \\ \text{R2 = 104} \\ \text{T1 = 25} \\ \text{T2 = 125} \end{array} \\ \begin{array}{c} \text{TCR = } \\ 104 - 100 \\ 100(125 - 25) \\ \text{TCR = } \\ 4 \\ \end{array} \\ \begin{array}{c} \text{106} \\ \text{100} \end{array}$$

 $\frac{10000}{10000} \times 10^{6}$ TCR = 0.0004 × 10<sup>6</sup>

400ppm

TCR =

Where TCR is in ppm/°C, R1 is in ohms at room temperature, R2 is resistance at operating temperature in ohms, T1 is the room temperature in °C and T2 is the operating temperature in °C. Depending on the resistor element compositions, TCR can range from zero to as much as 6000ppm/°C.