

Split Trace Thin Film Fractional Resistor

Design Note: Method to creating ultra-low ohm (<1Ω) resistor values.

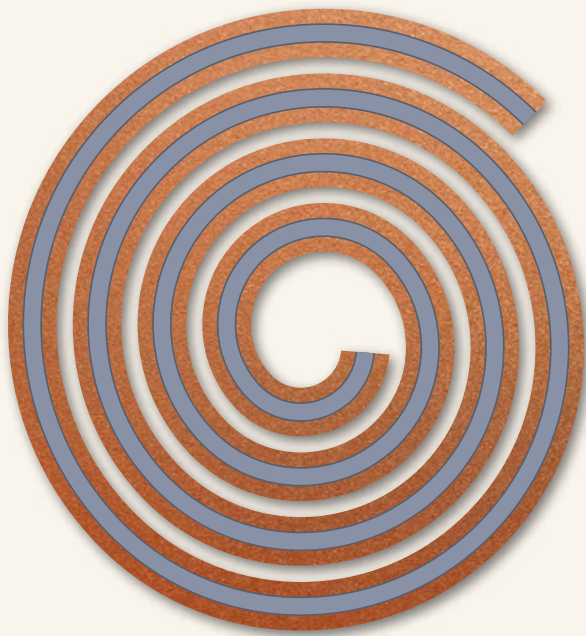


Image 1

Split Trace Spiral 0.004 Rs

Example: $0.004 \text{ Rs} * 10 \text{ ohms/square} = 0.04 \text{ ohms}$

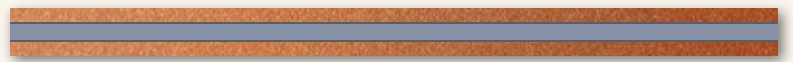


Image 2

Split Trace 0.02Rs

Example: $0.02\text{Rs} * 10 \text{ ohms/square} = 0.2 \text{ ohms}$

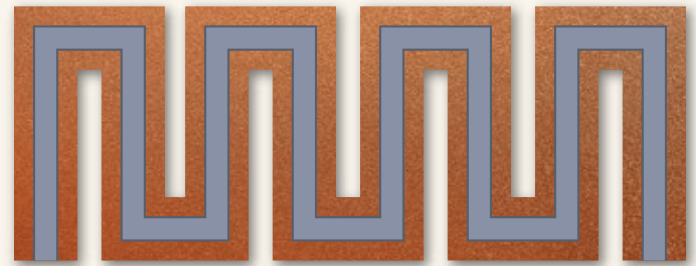


Image 3

Split Trace Meander 0.01Rs

Example: $0.01\text{Rs} * 10 \text{ ohms/square} = 0.1 \text{ ohms}$

Applications

• Current Sensing

• Very low value resistors