

# PALLADIUM

## Electroplating



SURON has recently established a palladium plating process through a detailed validation procedure. Components with palladium plating finish of thicknesses up to several microns (tenths of micro-inches), with under and overplates, are now available.



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**SURON**

Precision Solutions

# PALLADIUM

## Electroplating

Palladium (46Pd) is a bright silvery-white metal with a collection of valuable characteristics especially for the electronic industry.

Palladium plating provides a variety of properties, which gives it advantages in the electronic field.

Palladium electroplating is used over a wide range of electronic applications, from basic consumer products to complex military hardware.

### Properties

Relative hardness

Corrosion resistance

Absorption capacity for hydrogen

Low density

Just a few examples of components that can be electroplated with Suron's palladium are lead frames for multilayer ceramic capacitors (MLCC's), contacts and connectors.

### Comparison of Palladium Properties to Other Materials

Property	Palladium (Pd)	Gold (Au)	Silver (Ag)
Density [gr/cm <sup>3</sup> ]	12.02	19.32	10.49
Melting Temp [°C/°F]	1552°C / 2826°F	1064°C / 1948°F	962°C / 1764°F
Hardness [Vickers]	37	25	25
Resistivity [ohm-cm]	9.93×10	2.20×10	1.55×10

SURON is committed to ensuring the highest possible plating reliability over all of our components. Quality control includes a wide range of tests for the plating from appearance, composition, thickness, adhesion and functionality.

### Meets Standard Requirements

ASTM B679 – 98

MIL-P-45209B



SURON is qualified for the AS9100 D standard and has been supplying high reliability, plated components for the aerospace, defense, and medical industries for more than 45 years.