

PRODUCT DATA SHEET

CVD DIAMOND HIGH-POWER TERMINATION RESISTOR

Overview

This termination provides extremely high power-rating possibilities in the smallest area and can be used in applications up to 20 GHz with VSWR below 1.3.

The device is suitable for applications requiring high CW and peak powers, a broad frequency response, and small dimensions.

All thin-film products with pure Au contacts, suitable for soldering and wire bonding.

Typical product specifications

Substrate material: **CVD Diamond**

Substrate thermal conductivity: $TC > 1000 \text{ W/mK}$

Substrate relative dielectric constant: $\epsilon_r \sim 5.5$

Resistor material: **TaN**

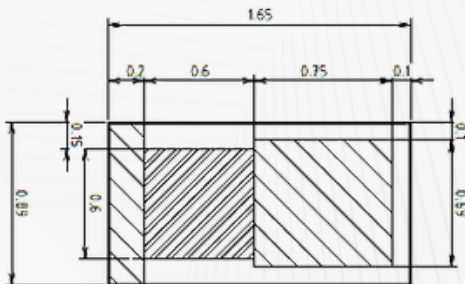
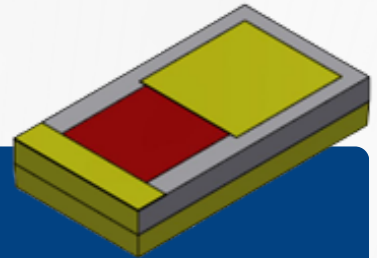
Contact material: **Au**

Power rating: 50 W

Product dimensions: 1.65 x 0.89 x 0.3 mm, see below

VSWR: measurements on two samples up to 22GHz

All sputtered coatings



VSWR (50 Ω - source)

