

TERMINATION, FLANGE MOUNT CVD DIAMOND 125 WATTS



DATA SHEET

PART SERIES: CT1310DHT

SHEET 1 OF 2
Dwg 1013205

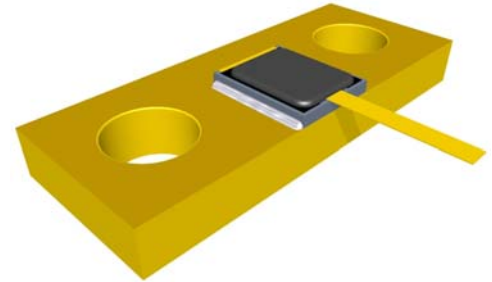
EN 13-3904
Revision -

FEATURES

- Small Size - Light Weight
- Highest Thermal Performance
- Excellent Peak Power Capability
- Rugged Passivated TaN Film
- Moisture Resistant
- Pure Gold Input Pads
- Solderable
- High Power

APPLICATIONS

- Broadcast
- High Power Filters
- High Power Amplifiers
- Instrumentation
- Isolators
- Military
- Satellite Communications
- Phased Array Radar



GENERAL DESCRIPTION

CVD Diamond Terminations offer extremely high power ratings and smallest size watt-per-watt of any termination on the planet. These terminations are ideal for military and space applications because of their high power capability, broad frequency response and small, light-weight size. They are ideal for peak power applications. They are manufactured using all thin film construction and have a pure thin film gold finish that is both wire bondable and solderable. They can be supplied with or without solderable tabs. High reliability tested versions per MIL-PRF-55342 are also available. These products are lead free, RoHS compliant and S-level approved. They also meet NASA out-gassing requirements for space applications.

ORDERING INFORMATION

Part Identifier: CT1310DHT

SPECIFICATIONS

1.0 ELECTRICAL

| | |
|--------------------|---|
| Nominal Impedance: | 50Ω ± 5% |
| Frequency Range: | DC – 14 GHz |
| Input Power CW: | 125 Watts |
| Peak Power: | 1250 Watts (1 μs pulse width/1% duty cycle) |
| VSWR: | 1.5:1 max |

2.0 ENVIRONMENTAL

| | |
|----------------------------|-----------------|
| Operating Temperature: | -55°C to +125°C |
| Non-operating Temperature: | -55°C to +150°C |
| Temperature Coefficient: | ±200 PPM/°C Max |

3.0 MARKING

| | |
|---------------|------|
| Unit Marking: | None |
|---------------|------|

4.0 QUALITY ASSURANCE

Sample Inspect Per MIL-STD-105, Level II, 1.0% AQL.
Visual and Mechanical Inspection for Conformance to Outline Drawing
Measure DC Resistance
Data Retention - Standard

5.0 PACKAGING

| | |
|-----------|----------------|
| Standard: | Tray Packaging |
|-----------|----------------|

TERMINATION, FLANGE MOUNT CVD DIAMOND 125 WATTS



DATA SHEET

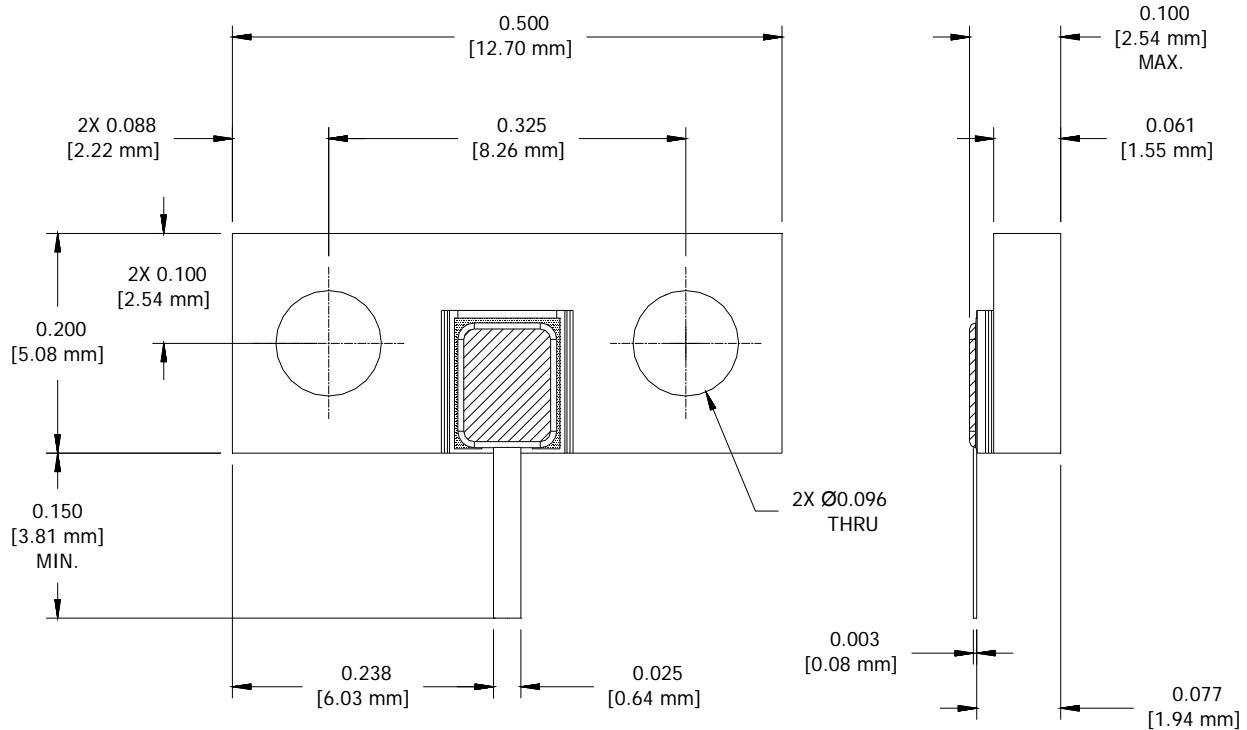
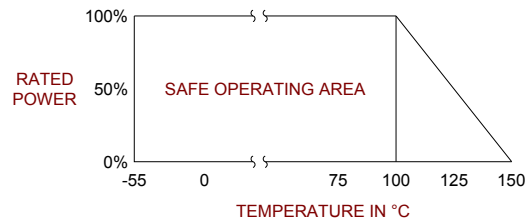
PART SERIES: CT1310DHT

SHEET 2 OF 2
Dwg 1013205

EN 13-3904
Revision -

6.0 MECHANICAL

| | |
|---------------------|-----------------------------|
| Substrate Material: | CVD Diamond |
| Resistive Element: | Passivated TaN |
| Tab: | Copper, Gold over Nickel |
| Flange: | Copper, Gold over Nickel |
| Metric Dimensions: | Provided for reference only |



Unless Otherwise Specified: TOLERANCE: X.XX = ± 0.01 X.XXX = ± 0.005