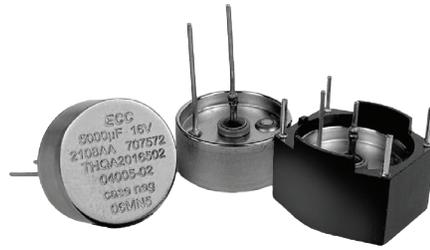


Hybrid Wet Tantalum

THQA2M2 Series

DLA 04005



- The THQA2 comes in a 0.6" round diameter base
- The THQM2 packages the THQA2 in a 4 pin DAP mount
- Voltages range from 10V-125V
- Cap values range from 215µF – 10,000µF
- Temperature range of -55°C to 125°C
- Standard tolerance ±20% (±10% available)

Product Overview

The THQA2 and THQM2 series capacitors utilize sintered tantalum anodes and ruthenium oxide coated cathodes operating in aqueous electrolyte with additives. The components are hermetically sealed in a welded tantalum case with a glass-to-metal anode terminal seal.

The THQA2 series capacitors come in a 0.6" round diameter case. The THQM2 series packages the THQA2 capacitor in a 4 pin DAP mount.

| Electrical | Physical |
|--|---|
| <p>Rated Voltage Range 10VDC to 125VDC</p> <p>Capacitance Range 215µF to 10,000µF</p> <p>Life (@ 85°C) >2000 hours @ Rated Voltage</p> | <p>Solderability To ANSI J-STD-002</p> <p>Operating Temperature Range -55°C to +85°C or 125°C with voltage derating (see page 3)</p> <p>Storage Temperature Range - 62°C to +130°C</p> |

| Mechanical | | | |
|---------------------|------------------------|-------------|--------------------------|
| Test | Method | Condition | Remarks |
| Shock | MIL-STD-202 METHOD 213 | G | 11 ms, 50G |
| Vibration | MIL-STD-202 METHOD 204 | D | 12 sweeps/axis, 20G peak |
| | MIL-STD-202 METHOD 214 | I, Letter D | 1.5 hours/axis, 12G rms |
| Moisture Resistance | MIL-STD-202 METHOD 106 | | 6V bias |

Capacitor Life

THQA2/M2 Series capacitors have an unlimited shelf life and are rated for >2,000 hours at 85°C and rated voltage or 125°C at derated voltage.

Environmental Compliance

THQA2/M2 Series are not RoHS compliant. THQA2/M2 series are REACH compliant.

- The standard terminals are 60/40 SnPb plated Nickel Wire
- RoHS compliant Lead free versions available. See part numbering nomenclature for ordering info.

Export Classification

THQA2 and THQM2 series capacitors are **ECCN EAR99**

Handling Guidelines

Attachment /Mounting by leads only is not allowed. Always ensure capacitor is firmly secured to PWB

Provide adequate care to protect the Glass to Metal Seal (GTMS)

- Avoid forces on the (+) pin, lateral, axial or torque.
- Avoid Mechanical Shock of any kind to the pin.
- Secure the part to PWB before soldering.

Soldering

- Use through-hole soldering methods in accordance with ANSI/IPC J-STD-001.

Lead trimming

- Provide adequate care if leads must be trimmed. Positive terminal can not be trimmed below the ball weld (0.167 from rim).

Part Number Description

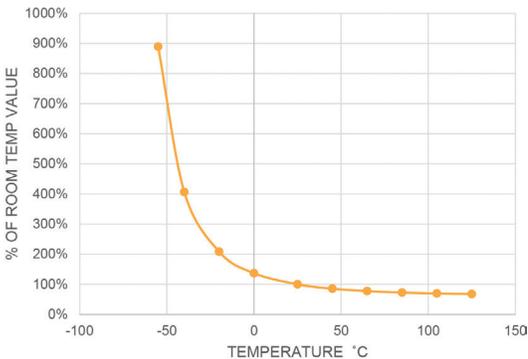
| Product Series | Voltage Rating | Cap Rating | Option: ±10% Rating | Optional: Lead Free |
|----------------|----------------|------------|------------------------|------------------------|
| THQ(X)2 | XXX | XXX | K | LF |

Ratings Table

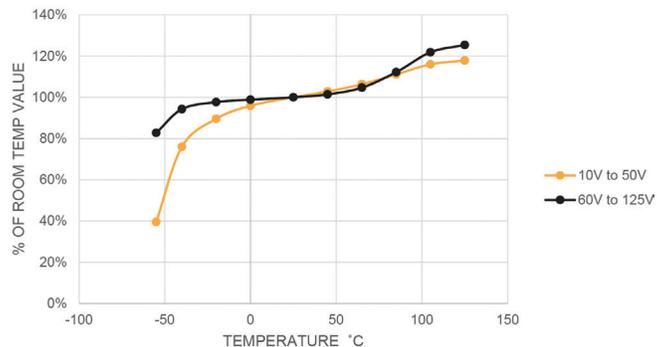
| Part Number | DLA PN | Voltage_85°C | Voltage_125°C | Cap (µF) | ESR (mΩ) | Height (in) | Mass (g) |
|-------------|----------|--------------|---------------|----------|----------|-------------|----------|
| THQA2010103 | 04005-01 | 10 | 6 | 10.000 | 200 | 0.274 | 8 |
| THQM2010103 | 04005-11 | 10 | 6 | 10.000 | 200 | 0.45 | 10 |
| THQA2016502 | 04005-02 | 16 | 9.5 | 5.000 | 200 | 0.274 | 8 |
| THQM2016502 | 04005-12 | 16 | 9.5 | 5.000 | 200 | 0.45 | 10 |
| THQA2025382 | 04005-03 | 25 | 15 | 3.800 | 200 | 0.274 | 8 |
| THQM2025382 | 04005-13 | 25 | 15 | 3.800 | 200 | 0.45 | 10 |
| THQA2030302 | 04005-04 | 30 | 18 | 3.000 | 250 | 0.274 | 8 |
| THQM2030302 | 04005-14 | 30 | 18 | 3.000 | 250 | 0.45 | 10 |
| THQA2035252 | 04005-05 | 35 | 21 | 2.500 | 250 | 0.274 | 8 |
| THQM2035252 | 04005-15 | 35 | 21 | 2.500 | 250 | 0.45 | 10 |
| THQA2050152 | 04005-06 | 50 | 30 | 1.500 | 250 | 0.274 | 8 |
| THQM2050152 | 04005-16 | 50 | 30 | 1.500 | 250 | 0.45 | 10 |
| THQA2060871 | 04005-07 | 60 | 36 | 870 | 350 | 0.274 | 8 |
| THQM2060871 | 04005-17 | 60 | 36 | 870 | 350 | 0.45 | 10 |
| THQA2075561 | 04005-08 | 75 | 45 | 565 | 500 | 0.274 | 8 |
| THQM2075561 | 04005-18 | 75 | 45 | 565 | 500 | 0.45 | 10 |
| THQA2100361 | 04005-09 | 100 | 60 | 360 | 800 | 0.274 | 8 |
| THQM2100361 | 04005-19 | 100 | 60 | 360 | 800 | 0.45 | 10 |
| THQA2125211 | 04005-10 | 125 | 75 | 215 | 1250 | 0.274 | 8 |
| THQM2125211 | 04005-20 | 125 | 75 | 215 | 1250 | 0.45 | 10 |

Average Electrical Performance

Typical ESR vs Temperature
1 KHz



Typical Capacitance vs Temperature
120 Hz



2D Drawing - THQA2

FIGURE 1: THQA2

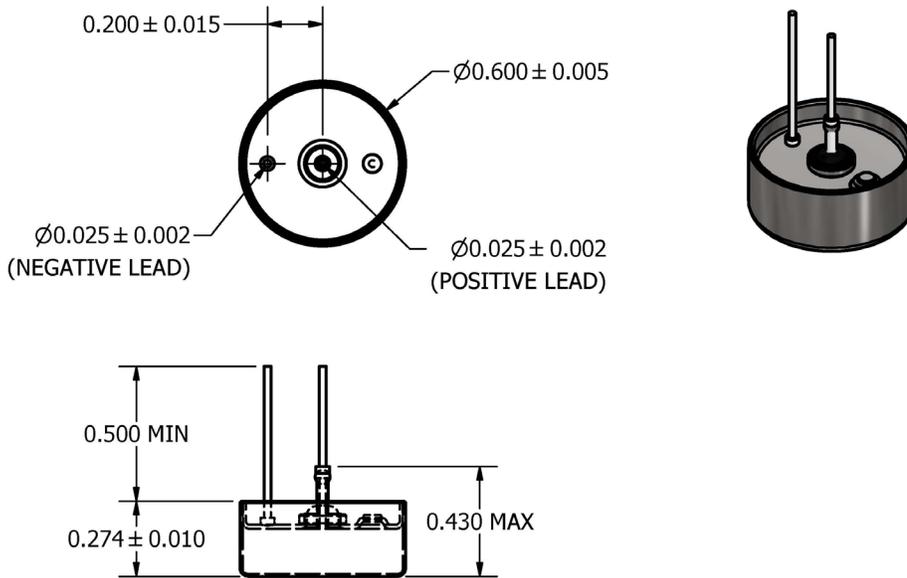


FIGURE 2: THQM2

