



# Tantalum High Reliability Commercial Off-the-Shelf (COTS) T428 Series High Volumetric Efficiency Facedown MnO<sub>2</sub>



## Why Choose KEMET

KEMET applies world-class service and quality to deliver industry-leading, high performance capacitance solutions worldwide. With 95% of possible dielectric solutions, KEMET offers the world's most complete line of surface mount and through-hole capacitor technologies across tantalum, ceramic, film, aluminum and paper dielectrics. One world. One KEMET.

## Features & Benefits

- Highest capacitance and volumetric efficiency (CV/cc) of any molded leadframe product
- Higher power dissipation
- Pick-and-place friendly molded package eliminates "drops" associated with conformal coating
- Enhanced ripple current
- Taped and reeled per EIA 481-1
- SnPb termination finish
- Laser-marked case
- 100% surge current test available
- Halogen-free epoxy
- Extended range values
- RoHS Compliance and lead-free terminations available

## Product Checklist

- What is the circuit operating voltage?
- What is the application temperature?
- What are the physical space restrictions?
- What is the necessary reliability level?
- What is the expected annual volume?

For more information, samples and engineering kits, please visit us at [www.kemet.com](http://www.kemet.com) or call 1.877.myKEMET.

## Programs Supported

Typical applications include radar pulse and switched-mode power supply decoupling and filtering in the following industries:

- Telecommunications
- Industrial
- Computer
- Defense
- Aerospace



## KEMET Electrical/Physical Characteristics

<b>Case Sizes</b>	P
<b>Tolerances</b>	± 5%, ± 10%, ± 20%
<b>Dielectric</b>	Tantalum MnO <sub>2</sub>
<b>Temperature Range</b>	-55 °C to +125 °C
<b>Voltage Options</b>	4 – 50 VDC
<b>Capacitance Values</b>	15 – 470 μF

## Ordering Information

T	428	P	227	K	006	A	H	61	10
Capacitor Class	Series	Case Sizes	Capacitance Code (pF)	Capacitance Tolerance	Voltage	Failure Rate/Design	Lead Material	Surge	ESR
T = Tantalum	High Volumetric Efficiency Facedown Hi-Rel MnO <sub>2</sub> COTS	P	First two digits represent significant figures. Third digit specifies number of zeros	J = ±5% K = ±10% M = ±20%	004 = 4 V 006 = 6.3 V 010 = 10 V 015 = 15 V 020 = 20 V 025 = 25 V 035 = 35 V 050 = 50 V	A = N/A B = 0.1% /1000 hrs	H = Standard solder coated (SnPb 5% Pb minimum) T = 100% tin (Sn)	61 = None 62 = 10 cycles 25°C 63 = 10 cycles, -55°C and 85°C	10 = Standard 20 = Low 30 = Ultra low