

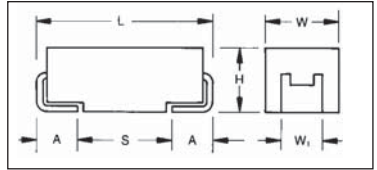
Tantalum Solid Electrolytic Chip Capacitors Conductive Polymer Multianode



- Conductive polymer multianode
- Extremely Low ESR
- Reduced ignition failure mode
- 3x reflow 260°C compatible
- Volumetric efficiency
- High frequency capacitance retention



LEAD-FREE
LEAD-FREE COMPATIBLE
COMPONENT



CASE DIMENSIONS: millimeters (inches)

| Code | EIA Code | EIA Metric | L±0.20 (0.008) | W+0.20 (0.008) -0.10 (0.004) | H+0.20 (0.008) -0.10 (0.004) | W ₁ ±0.20 (0.008) | A+0.30 (0.012) -0.20 (0.008) | S Min. |
|------|----------|------------|----------------|---------------------------------|---------------------------------|------------------------------|---------------------------------|--------------|
| E | 2917 | 7343-43 | 7.30 (0.287) | 4.30 (0.169) | 4.10 (0.162) | 2.40 (0.094) | 1.30 (0.051) | 4.40 (0.173) |

W₁ dimension applies to the termination width for A dimensional area only.

For part marking see page 132

HOW TO ORDER

TCM | **E** | **108** | **M** | **004** | **R** | **0010**

Type | **Case Size** | **Capacitance Code** | **Tolerance** | **Rated DC Voltage** | **Packaging** | **ESR in mΩ**

See table above

pF code: 1st two digits represent significant figures, 3rd digit represents multiplier (number of zeros to follow)

M=±20%

004=4Vdc
006=6.3Vdc
010=10Vdc
035=35Vdc

R = 7" T/R
S = 13" T/R

TECHNICAL SPECIFICATIONS

Technical Data: All technical data relate to an ambient temperature of +25°C

| | | | | | | |
|------------------------------------|--|-----|-----|----|----|--|
| Capacitance Range: | 1000 μF | | | | | |
| Capacitance Tolerance: | ±20% | | | | | |
| Leakage Current DCL: | 0.1CV | | | | | |
| Rated Voltage (V _R) | ≤ +85°C: | 4 | 6.3 | 10 | 35 | |
| Category Voltage (V _C) | ≤ +105°C: | 3.2 | 5 | 8 | 28 | |
| Surge Voltage (V _S) | ≤ +85°C: | 5.2 | 8 | 13 | 46 | |
| Surge Voltage (V _S) | ≤ +105°C: | 4 | 6 | 10 | 35 | |
| Temperature Range: | -55°C to +105°C | | | | | |
| Reliability: | 1% per 1000 hours at 85°C, V _R with 0.1Ω/V series impedance, 60% confidence level | | | | | |



**Tantalum Solid Electrolytic Chip Capacitors
 Conductive Polymer Multianode**

**CAPACITANCE AND RATED VOLTAGE, VR (VOLTAGE CODE) RANGE
 (LETTER DENOTES CASE SIZE)**

| Capacitance | | Rated Voltage DC (V _R) to 85°C | | | |
|-------------|------|--|----------|---------|---------|
| μF | Code | 4V (G) | 6.3V (J) | 10V (A) | 35V (V) |
| 22 | 226 | | | | E(25) |
| 33 | 336 | | | | |
| 47 | 476 | | | | |
| 68 | 686 | | | | |
| 100 | 107 | | | | |
| 150 | 157 | | | | |
| 220 | 227 | | | | |
| 330 | 337 | | E* | E* | |
| 470 | 477 | | E* | E* | |
| 680 | 687 | | | | |
| 1000 | 108 | E(10,12) | | | |
| 1500 | 158 | | | | |

Available Ratings, (ESR ratings in mOhms in brackets)

Engineering samples - please contact manufacturer

*Codes under development – subject to change

Note: Voltage ratings are minimum values. AVX reserves the right to supply higher ratings in the same case size, to the same reliability standards.

RATINGS & PART NUMBER REFERENCE

| AVX Part No. | Case Size | Capacitance (μF) | Rated Voltage (V) | DCL (μA) Max. | DF % Max. | ESR Max. (mΩ) @100kHz | 100kHz RMS Current (mA) | | | 100kHz RMS Voltage (mV) | | |
|---|-----------|------------------|-------------------|---------------|-----------|-----------------------|-------------------------|------|-------|-------------------------|------|-------|
| | | | | | | | 25°C | 85°C | 105°C | 25°C | 85°C | 105°C |
| 4 Volt @ 85°C (3.2 Volt @ 105°C) | | | | | | | | | | | | |
| TCME108M004#0010 | E | 1000 | 4 | 400 | 8 | 10 | 4062 | 3656 | 2640 | 41 | 37 | 26 |
| TCME108M004#0012 | E | 1000 | 4 | 400 | 8 | 12 | 3708 | 3337 | 2410 | 44 | 40 | 12 |
| 6.3 Volt @ 85°C (5 Volt @ 105°C) | | | | | | | | | | | | |
| TCME337M006#0010 | E | 330 | 6.3 | 198 | 8 | 10 | 4062 | 3656 | 2640 | 41 | 37 | 26 |
| TCME447M006#0010 | E | 470 | 6.3 | 282 | 8 | 10 | 4062 | 3656 | 2640 | 41 | 37 | 26 |
| 35 Volt @ 85°C (28 Volt @ 105°C) | | | | | | | | | | | | |
| TCME226M035#0025 | E | 22 | 35 | 77 | 8 | 25 | 2569 | 2312 | 1670 | 64 | 58 | 42 |

- Insert R for 7" reel or S for 13" reel

All technical data relates to an ambient temperature of +25C. Capacitance and DF are measured at 120Hz, 0.5RMS with DC bias of 2.2 volts. DCL is measured at rated voltage after 5 minutes.

TCM series is MSL level 3 according to J-STD-020C.

ESR allowed to move up to 1.25 times catalog limit post mounting.

NOTE: AVX reserves the rights to supply higher voltage rating in the same case size, to the same reliability standards

