## SURFACE MOUNT TANTALUM

## SCT (Surface Mount) SERIES

## SURFACE MOUNT TANTALUM

The SCT series is a molded solid tantalum chip capacitor designed to meet specifications worldwide. The SCT series includes EIA standard case sizes and ratings. These capacitors incorporate state-of-the-art construction allowing the use of modern high temperature soldering techniques.

## FEATURES:

- Precision molded case with flat surface for vacuum pick-up
- Laser marking and bold videcon - readable polarity stripe
- Glue pad on underside for bonding to circuit board prior to soldering
- Encapsulate material satisfies the UL 94 VO flammability classification


## RATINGS

Capacitance Range: $0.1 \mu \mathrm{f}$ to $150 \mu \mathrm{f}$
Tolerance: $\pm 10 \%$
Voltage Range: 6.3 V to 50 V

## PERFORMANCE SPECIFICATIONS

## Operating Temperature Range:

$-55^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}\left(-67^{\circ} \mathrm{F}\right.$ to $\left.+185^{\circ} \mathrm{F}\right)$
Capacitance Tolerance (K): $\pm 10 \%$

## MECHANICAL SPECIFICATIONS

## Lead Solderability:

Meets the requirements of MIL-STD 202, Method 208

## Marking:

Consists of capacitance, DC voltage, and polarity.
Resistance to Board Cleaning:
The use of high acidity fluxes must be avoided. The encapsulation and termination materials are resistant to immersion in boiling solvents such as: Freon TMS and TMC, Trichloroethane, Methylene Chloride, Isopropyl alcohol (IPA), etc., up to $+50^{\circ} \mathrm{C}$. If ultrasonic cleaning is to be applied in the final wash stages the application time should be less than 5 minutes with a maximum power density of $9 \mathrm{~mW} / \mathrm{cc}$ to avoid damage to terminations.

## ORDERING INFORMATION



## CAPACITANCE RANGE:

| Rated Voltage (WV) | 6.3 | 10 | 16 | 20 | 25 | 35 | 50 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surge Voltage <br> Cap $(\mu \mathrm{f})$ <br> (V) | 8 | 13 | 20 | 26 | 32 | 46 | 65 |
| 0.10 |  |  |  |  |  | A |  |
| 0.47 |  |  |  |  | A |  |  |
| 1.0 |  |  | A |  |  | B | C |
| 1.5 |  |  | A |  | B |  |  |
| 2.2 |  | A | A | B |  | C | D |
| 3.3 | A |  | B |  |  |  |  |
| 4.7 |  | A, B | B |  | C | D |  |
| 6.8 | B |  | C | C |  | D |  |
| 10.0 |  | B, C | B, C |  | D | D |  |
| 15.0 |  | C | C | D | D |  |  |
| 22.0 |  | C | D |  | D | H |  |
| 33.0 | C |  | D |  | H |  |  |
| 47.0 | C | D | D | H |  |  |  |
| 68.0 | D |  |  | H |  |  |  |
| 100.0 | D |  | H |  |  |  |  |
| 150.0 | D | H |  |  |  |  |  |

SCT Series Dimensions: in (mm)

| Case <br> Size | $\mathbf{L} \pm 0.2$ <br> $( \pm 0.008)$ | $\mathbf{W}_{1} \pm 0.2$ <br> $( \pm 0.008)$ | $\mathbf{W}_{2} \pm 0.1$ <br> $( \pm 0.004)$ | $\mathbf{H} \pm 0.2$ <br> $( \pm 0.008)$ | $\mathbf{t w} \pm 0.3$ <br> $( \pm 0.012)$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A | $.126(3.2)$ | $.063(1.6)$ | $.047(1.2)$ | $.063(1.6)$ | $.031(0.8)$ |
| B | $.138(3.5)$ | $.110(2.8)$ | $.087(2.2)$ | $.075(1.9)$ | $.031(0.8)$ |
| C | $.236(6.0)$ | $.126(3.2)$ | $.087(2.2)$ | $.102(2.6)$ | $.051(1.3)$ |
| D | $.287(7.3)$ | $.169(4.3)$ | $.094(2.4)$ | $.114(2.9)$ | $.051(1.3)$ |
| H | $.287(7.3)$ | $.169(4.3)$ | $.094(2.4)$ | $.162(4.1)$ | $.051(1.3)$ |



