SHANGHAI JINPEI ELECTRONICS CO., LTD

# SMD TANTALUM CAPACITOR

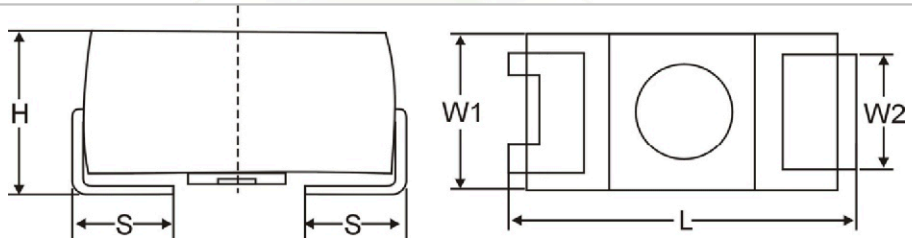
# CA45

## FEATURES

- Molded case available in six case codes
- Compatible with all popular "High Volume" automatic pick and equipment
- Optical character recognition qualified
- RoHS Compliance & Lead Free Terminations.

## SPECIFICATIONS

| | |
|---|---|
| Rated Voltage | D.C. 4V ~ 50V |
| Operating Temperature Range | −55℃ to +125℃ (>85℃ with rated voltage derating.) |
| Capacitance Range | 0.1 μ F to 470 μ F |
| Capacitance Tolerance | ± 20%(M), ± 10%(K), ± 5%(J) (For special order) |
| DC Leakage Current | Io≤0.01 $C_R V_R$ or 0.5 μ A (whicheveris greater) |
| Load Life | 85℃, After applying rated voltagefor 2000hours at 85℃, Capacitan ce change: within ± 10% of the initial value Dissipation factor: Not more than 150% of the specified value Case Sizes and Dimensions |
| Case Sizes and Dimensions | Please see Table 2 |
| Dissipation Factor at 20℃ | Please see Table 1 |
| Temperature Characteristics | Please see Table 1 |





## EMPERATURE CHARACTERISTICS

Table 1

| Capacitance(μF) | Capacitance Change (%) | | | DF Max. (%) | | | | DCL Max. (MA) | |
|---|---|---|---|---|---|---|---|---|---|
| | −55℃ | +85℃ | +125℃ | −55℃ | +25℃ | +85℃ | +125℃ | +85℃ | +125℃ |
| ≤1.0 | ±10 | ±10 | ±12 | 6 | 4 | 6 | 6 | +10 Io | +12 Io |
| 1.5~68 | | | | 10 | 6 | 10 | 10 | | |
| 100~470 | | | | 12 | 8 | 12 | 12 | | |

## DIMENSIONS – MILLIMETERS

Unit:mm Table 2

| CaseSize | | L ± 0.3 | W1±0.3 | H ±0.3 | S ± 0.3 | W2±0.2 |
|---|---|---|---|---|---|---|
| P | 2012 | 2.0 | 1.2 | 1.2 | 0.5 | 1.2 |
| A | 3216 | 3.2 | 1.6 | 1.6 | 0.8 | 1.2 |
| B | 3528 | 3.5 | 2.8 | 1.9 | 0.8 | 2.2 |
| C | 6032 | 6.0 | 3.2 | 2.5 | 1.3 | 2.2 |
| D | 7343 | 7.3 | 4.3 | 2.8 | 1.3 | 2.4 |
| E | 7343 | 7.3 | 4.3 | 4.0 | 1.3 | 2.4 |

## Rated Voltage, Nominal Capacitance and Case Sizes

| UR / V | 4 | 6.3 | 10 | 16 | 20 | 25 | 35 | 50 |
|---|---|---|---|---|---|---|---|---|
| Voltage Derating (V) | 2.5 | 4 | 6.3 | 10 | 13 | 16 | 23 | 33 |
| Surge Voltage≤ +85℃ ( u ) | 5 | 8 | 13 | 20 | 26 | 32 | 46 | 65 |
| Surge Voltage≤ +125℃ ( u ) | 3.4 | 5.0 | 9 | 12 | 16 | 20 | 26 | 38 |
| Capacitance ( μ F) | Case Size (standard / miniature / Super miniature) | | | | | | | |
| 0.1 | | | | | | | A | A/B |
| 0.15 | | | | | | | A | A/B |
| 0.22 | | | | | | | A | A/B |
| 0.33 | | | | | | A | A | A/B |
| 0.47 | | | | P | p | A | A/B | A/C |
| 0.68 | | | p | A/P | A/P | A | A/B | A/C |
| 1.0 | A | A | A/P | A/P | A | A/B | A/B | C |
| 1.5 | A/P | A | A/P | A | A/B | A/B | A/B/C | D |
| 2.2 | A/P | A | A/P | A/B | A/B | A/B/C | B/C | CD |
| 3.3 | A/P | A | A/P | A/B | A/B | B/C | C/D | D |
| 4.7 | A/P | A | A/B/P | A/B | A/B/C | B/C | C/D | D |
| 6.8 | A/P | A | A/B | A/B | B/C | B/C/D | C/D | D |
| 10 | A/P | A/B | A/B | A/B/C | B/C/D | C/D | C/D | |
| 15 | A/B | A | A/B/C | B/C | C | D | DE | |
| 22 | A/B | A/B/C | A/B/C | B/C/D | C/D | D/E | | |
| 33 | B/C | A/B | B/C/D | C/D | C/D | D/E | | |
| 47 | B/C | B/C | B/C/D | C/D | D/E | | | |
| 68 | B/C | B/C/D | C/D | D | D/E | | | |
| 100 | B/C | B/C | C/D | D/E | | | | |
| 150 | C/D/E | C/D | D/E | E | | | | |
| 220 | C/D/E | C/D | D | | | | | |
| 330 | E | D | | | | | | |