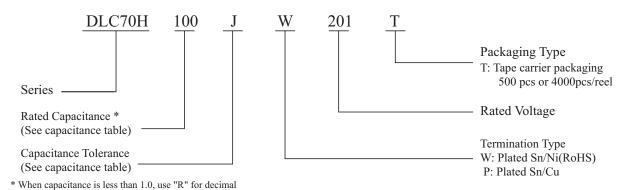
DLC70H (.040" x .020")

♦ DLC70H Capacitance & Rated Voltage Table

| Cap.pF | Code | Tol. | Rated WVDC | Cap.pF | Code | Tol. | Rated WVDC | Cap.pF | Code | Tol. | Rated WVDC |
|--------|------|-------------|---------------------|--------|------|------|---------------------|--------|------|------|---------------|
| 0.1 | 0R1 | | | 2.0 | 2R0 | | | 10 | 100 | | |
| 0.2 | 0R2 | | | 2.1 | 2R1 | | | 11 | 110 | | |
| 0.3 | 0R3 | | | 2.2 | 2R2 | | | 12 | 120 | | |
| 0.4 | 0R4 | | | 2.4 | 2R4 | | | 13 | 130 | | |
| 0.5 | 0R5 | | | 2.7 | 2R7 | | | 15 | 150 | F,G, | 200V |
| 0.6 | 0R6 | | | 3.0 | 3R0 | A,B, | | 16 | 160 | J | Code |
| 0.7 | 0R7 | A,B, C,D | 200V Code 201 | 3.3 | 3R3 | C,D | 200V Code 201 | 18 | 180 | | 201 |
| 0.8 | 0R8 | | | 3.6 | 3R6 | | | 20 | 200 | | |
| 0.9 | 0R9 | | | 3.9 | 3R9 | | | 22 | 220 | | |
| 1.0 | 1R0 | | | 4.3 | 4R3 | | | 24 | 240 | | |
| 1.1 | 1R1 | | | 4.7 | 4R7 | | | 27 | 270 | | |
| 1.2 | 1R2 | | | 5.1 | 5R1 | | | 30 | 300 | | 50V |
| 1.3 | 1R3 | | | 5.6 | 5R6 | | | 33 | 330 | | Code 500 |
| 1.4 | 1R4 | | | 6.2 | 6R2 | | | | | | |
| 1.5 | 1R5 | | | 6.8 | 6R8 | | | | | | |
| 1.6 | 1R6 | | | 7.5 | 7R5 | B,C, | | | | | |
| 1.7 | 1R7 | | | 8.2 | 8R2 | | | | | | |
| 1.8 | 1R8 | | | 9.1 | 9R1 | | | | | | |
| 1.9 | 1R9 | | | | | | | | | | |

♦ Part Numbering



| Code | A | В | С | D | F | G | J |
|-----------|------------------------|--------------|------------------------|--------------|------|-----|------|
| Tolerance | $\pm 0.05 \mathrm{pF}$ | $\pm 0.1 pF$ | $\pm 0.25 \mathrm{pF}$ | $\pm 0.5 pF$ | ± 1% | ±2% | ± 5% |

♦ DLC70H Capacitor Dimensions

unit:inch(millimeter)

| | Т | Type / Outlines | | Ca | Plated | | |
|--------|----------------|-----------------|-------------------|------------------------------------|--------------------------------------|------------------------------------|-----------------|
| Series | Term. Code | | | Length (Lc) | Width (Wc) | Thickness (Tc) | Material |
| | W | Te I | | | | | Sn/Ni (RoHS) |
| DLC70H | L | | Chip | $.039 \pm .005 \\ (1.00 \pm 0.12)$ | $.020 \pm .004$ (0.51 \pm 0.10) | $.020 \pm .004 \\ (0.51 \pm 0.10)$ | 90 Sn10Pb/Ni |
| DLC70H | P (Non-Mag) | Tc] | Chip (Non-Mag) | | | | Sn/Cu (RoHS) |

♦ Design Kits

These capacitors are 100% RoHS. Kits are available in Magnetic and Non-Magnetic that contain 10(ten) pieces per value; number of values per kit varies, depending on case size and capacitance.

| Kit | Description (pF) | Values (pF) | Tolerance |
|---------------|------------------|---|-----------|
| DKDLC70H01 | 0.1 - 2.0 | 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0, 1.2, 1.5, 1.6, 1.8, 2.0 | ±0.10pF |
| DKDLC70H02 | 1.0 - 10 | 1.0, 1.2, 1.5, 1.8, 2.0, 2.2, 2.4, 2.7, 3.0, 3.3, 3.9, 4.7, 5.6, 6.8, 8.2 | ±0.10pF |
| DKDLC / 01102 | | 10 | ± 5% |
| DKDLC70H03 | 10 - 33 | 10, 12, 13, 15, 16, 18, 20, 22, 24, 27, 30, 33 | ± 5% |

♦ Performance

| Item | Specifications | | |
|---------------------------------------|--|--|--|
| Quality Factor (Q) | 2,000 min. | | |
| Insulation Desigtance (ID) | 10 ⁵ Megohms min. @ +25 °C at rated WVDC. | | |
| Insulation Resistance (IR) | 10⁴ Megohms min. @ +125 °C at rated WVDC. | | |
| Rated Voltage | 200V | | |
| Dielectric Withstanding Voltage (DWV) | 250% of rated voltage for 5 seconds. | | |
| Operating Temperature Range | -55°C to +125°C | | |
| Temperature Coefficient (TC) | $0\pm30~\mathrm{ppm/^{\circ}C}$ | | |
| Capacitance Drift | $\pm 0.2\%$ or ± 0.05 pF, whichever is greater. | | |
| Piezoelectric Effects | None | | |

◆Environmental Tests

| Item | Specifications | Method |
|--|--|---|
| Thermal Shock Moisture Resistance | DWV: the initial value IR: Shall not be less than 30% of the initial value Capacitance change: no more than 0.5% or 0.5pF, whichever is greater. | MIL-STD-202, Method 107, Condition A. At the maximum rated temperature stay 30 minutes. The time of removing shall not be more than 3 minutes. Perform the five cyc les. MIL-STD-202, Method 106. |
| Humidity (steady state) | DWV: the initial value IR: the initial value Capacitance change: no more than 0.3% or 0.3pF, whichever is greater. | MIL-STD-202, Method 103, Condition A, with 1.5 Volts D.C. applied while subjected to an environment of 85°C with 85% relative humidity for 240 hours minimum. |
| Life | IR: Shall not be less than 30% of the initial value Capacitance change: no more than 2.0% or 0.5pF, whichever is greater. | MIL-STD-202, Method 108, for 2000 hours, at 200°C. 200% Rated voltage D.C. applies |