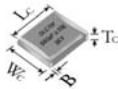
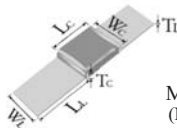
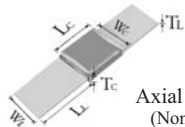
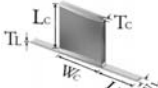


◆ **DLC70L Capacitor Dimensions**

unit:inch(millimeter)

Series	Term. Code	Type/Outlines	Capacitor Dimensions				Lead Dimensions			Plated Material
			Length (L _C)	Width (W _C)	Thick. (T _C)	Overlap (B)	Length (L _L)	Width (W _L)	Thickness (T _L)	
70L	P	 Chip (Non-Mag)	1.350 ±.050 (34.29 ±1.27)	1.350 ±.050 (34.29 ±1.27)	.197 (5.00) max	.039 ~.071 (1.00~ 1.80)	—	—	—	Non-mag, Copper Plated 100% Sn
70L	MN	 Microstrip (Non-Mag)				—	.748 (19.00) min	1.299 ± .020 (33.00 ±0.50)	.012 ± .001 (0.30 ±0.025)	Silver-plated Copper
70L	AN	 Axial Ribbon (Non-Mag)						.157 ± .010 (4.00 ±0.25)	.008 ± .001 (0.20 ±0.025)	
70L	FN	 Radial Ribbon (Non-Mag)					.669 (17.00) min			

◆ Performance

Item	Specifications
Quality Factor (Q)	No less than 1000pF, Q value more than 2000, Test frequency 1MHz; More than 1000pF, Q value more than 2000, Test frequency 1KHz;
Insulation Resistance (IR)	Test Voltage: 500V 10 ⁵ Megohms min. @ +25°C at rated WVDC. 10 ⁴ Megohms min. @ +125°C at rated WVDC.
Rated Voltage	See Rated Voltage Table
Dielectric Withstanding Voltage (DWV)	150% of Rated Voltage for 5 seconds, 500VDC < Rated Voltage ≤ 1250VDC 120% of Rated Voltage for 5 seconds, Rated Voltage > 1250VDC
Operating Temperature Range	−55°C to +125°C
Temperature Coefficient (TC)	0 ± 30 ppm/°C
Capacitance Drift	± 0.2% or ± 0.05pF, whichever is greater.
Piezoelectric Effects	None

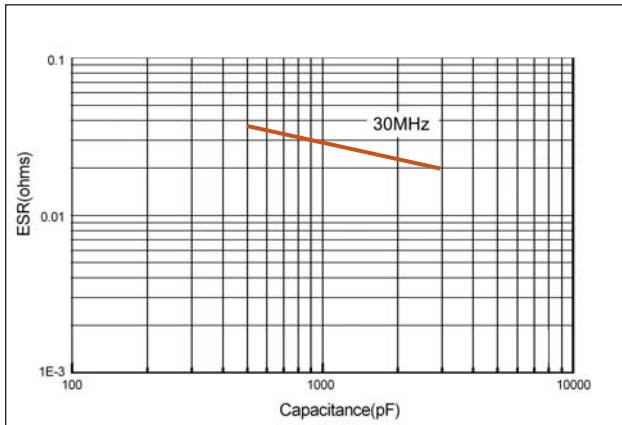
Capacitors are designed and manufactured to meet the requirements of MIL-PRF-55681 and MIL-PRF-123.

◆ Environmental Tests

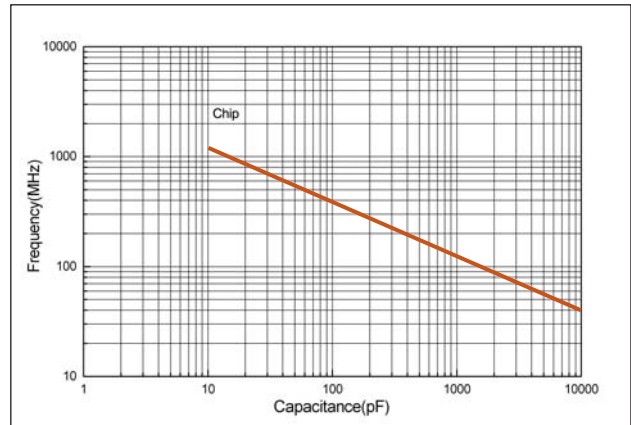
Item	Specifications	Method
Thermal Shock	DWV: the initial value IR: Shall not be less than 30% of the initial value Capacitance change: no more than 0.5% or 0.5pF, whichever is greater.	MIL-STD-202, Method 107, Condition A. At the maximum rated temperature stay 30 minutes. The time of removing shall not be more than 3 minutes. Perform the five cycles.
Moisture Resistance		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 125°C. 200% of Rated Voltage for Capacitors, Rated Voltage ≤ 500VDC 120% of Rated Voltage for Capacitors, 500VDC < Rated Voltage ≤ 1250VDC 100% of Rated Voltage for Capacitors, Rated Voltage > 1250VDC
Terminal Strength	Microstrip: more than 20 N;	MIL-STD-202, Method 211.

◆ **DLC70L Performance Curve**

ESR vs Capacitance
measured @ 30MHz



Self Resonant Frequency vs
Capacitance



Test Conditions:

Typical responses for sample placed across a 1.1-inch gap in a 114-mil-wide Micro-strip on 60 mil FR4 PCB.

Measurements de-embedded to sample edges using TRL calibration procedures.

70L Rated Current vs Frequency

