

DLC70D Series

◆Product Features

High Q, High Power, Low ESR/ESL, low Noise, High Self-Resonance,
 Ultra-Stable Performance.



◆DLC70D Series Rated Capacitance Table

Cap.pF	Code	Tol.	Rated WVDC	Cap.pF	Code	Tol.	Rated WVDC	Cap.pF	Code	Tol.	Rated WVDC
0.5	0R5	B,C,D	200V Code 201	3.0	3R0	B,C,D	200V Code 201	20	200	F,G, J,K, M	200V Code 201
0.6	0R6			3.3	3R3			22	220		
0.7	0R7			3.6	3R6			24	240		
0.8	0R8			3.9	3R9			27	270		
0.9	0R9			4.3	4R3			30	300		
1.0	1R0			4.7	4R7			33	330		
1.1	1R1			5.1	5R1			36	360		
1.2	1R2			5.6	5R6			39	390		
1.3	1R3			6.2	6R2			43	430		
1.4	1R4			6.8	6R8			47	470		
1.5	1R5			7.5	7R5	51		510			
1.6	1R6			8.2	8R2	56		560			
1.7	1R7			9.1	9R1	62		620			
1.8	1R8			10	100	68		680			
1.9	1R9			11	110	75		750			
2.0	2R0			12	120	82		820			
2.1	2R1			13	130	91		910			
2.2	2R2			15	150	100		101			
2.4	2R4			16	160	120		121			
2.7	2R7			18	180	150		151			
											100V Code 101

Remark: special capacitance, tolerances and WVDC are available, consult with DALICAP.

◆DLC70D Chip Dimensions

unit:inch(millimeter)

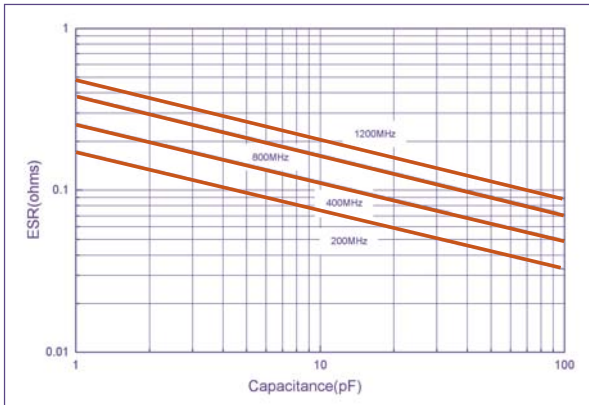
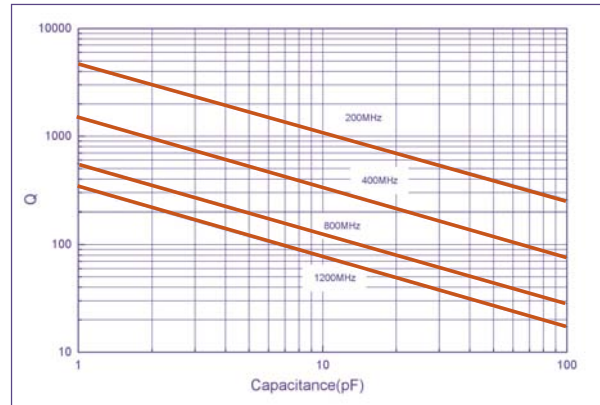
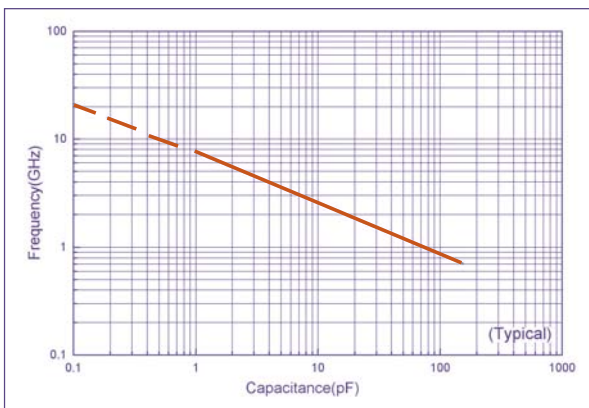
	Length	width	Thickness
DLC70D Chip Dimensions	0.08 ± .010 (2.0 ± 0.25)	.050 ± .010 (1.2 ± 0.25)	.057(1.45)max

◆ Performance

Item	Specifications
Quality Factor (Q)	greater than 10,000 at 1 MHz
Insulation Resistance (IR)	10 ⁶ Megohms min. @ +25°C at rated WVDC. 10 ⁵ Megohms min. @ +125°C at rated WVDC.
Rated Voltage	See Rated Voltage Table
Dielectric Withstanding Voltage(DWV)	250% of rated Voltage for 5 seconds.
Operating Temperature Range	-55°C to +125°C
Temperature Coefficient (TC)	+20~+70ppm/°C
Capacitance Drift	±0.02% or ±0.02pF, whichever is greater.
Piezoelectric Effects	None
Termination Type	See Termination Type Table

◆ Environmental Tests

Item	Specifications	Method
Thermal shock	DWV: the initial value IR: Shall be not less than 30% the initial value Capacitance change: no more than 0.5% or 0.5pF.	MIL-STD-202, Method 107, Condition A. At the maximum rated temperature(-55°C and 125°C) stay 30 minutes, The time of removing shall be not 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.	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 min.
Life	IR: Shall be not less than 30% the initial value Capacitance change: no more than 0.2%	MIL-STD-202, Method 108, for 2000 hours, at 125°C. 200% Rated voltage D.C. applied.

◆DLC70D Performance Curve
ESR VS Capacitance

Q VS Capacitance

Series resonance VS Capacitance

Current rating VS Capacitance
