

DLC70A Series

◆ Product Features

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



◆ DLC70A 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	A,B,C,D	150V Code 151	3.3	3R3	A,B,C,D	150V Code 151	24	240	F,G, J,K, M	150V Code 151
0.6	0R6			3.6	3R6			27	270		
0.7	0R7			3.9	3R9			30	300		
0.8	0R8			4.3	4R3			33	330		
0.9	0R9			4.7	4R7			36	360		
1.0	1R0			5.1	5R1			39	390		
1.1	1R1			5.6	5R6			43	430		
1.2	1R2			6.2	6R2			47	470		
1.3	1R3			6.8	6R8			51	510		
1.4	1R4			7.5	7R5	56		560			
1.5	1R5			8.2	8R2	62		620			
1.6	1R6			9.1	9R1	68		680			
1.7	1R7			10	100	75		750			
1.8	1R8			11	110	82		820			
1.9	1R9			12	120	91		910			
2.0	2R0			13	130	100		101			
2.1	2R1			15	150	110		111			
2.2	2R2			16	160	120		121			
2.4	2R4			18	180	130		131			
2.7	2R7	20	200	150	151						
3.0	3R0	22	220								

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

◆ DLC70A Chip Dimensions

unit:inch(millimeter)

	Length	width	Thickness
DLC70A Chip Dimensions	0.055+.015~-0.010 (1.4+0.38~-0.25)	.055 ± .010 (1.4 ± 0.25)	.057(1.45)max

◆ Performance

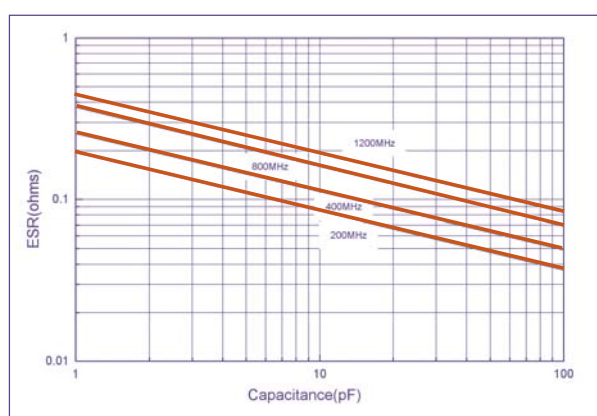
Item	Specifications
Quality Factor (Q)	greater than 10,000 at 1 MHz
Insulation Resistance (IR)	0.1 pF to 100 pF: 10 ⁶ Megohms min. @ +25°C at rated WVDC. 10 ⁵ Megohms min. @ +125°C at rated WVDC.
Rated Voltage	See Rated Voltage Table
Dielectric Withstanding Voltage(DWV)	250% of rated Voltage for 5 seconds.
Operating Temperature Range	-55°C to +125°C
Temperature Coefficient (TC)	0 ± 30ppm/°C
Capacitance Drift	± 0.02% or ± 0.02pF, whichever is greater.
Piezoelectric Effects	None
Termination Type	See Termination Type Table

◆ Environmental Tests

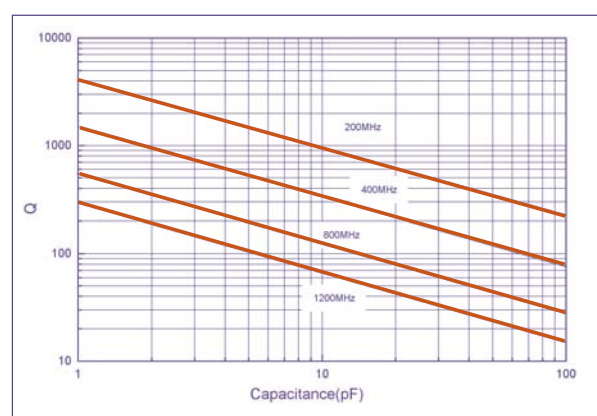
Item	Specifications	Method
Thermal shock	DWV: the initial value IR: Shall be not less than 30% the initial value Capacitance change: no more than 0.5% or 0.5pF.	MIL-STD-202, Method 107, Condition A. At the maximum rated temperature(-55°C and 125°C) stay 30 minutes, The time of removing shall be not more 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. applie

◆DLC70A Performance Curve

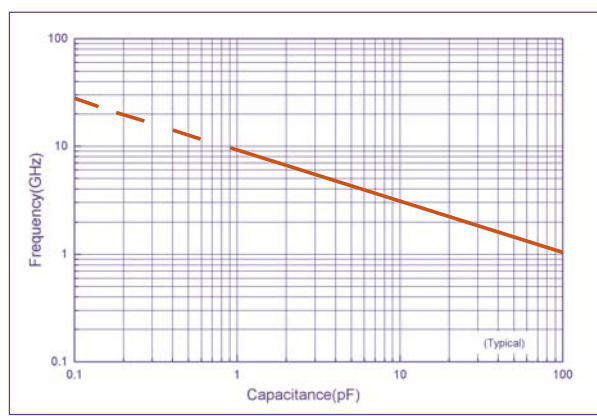
ESR VS Capacitance



Q VS Capacitance



Series resonance VS Capacitance



Current rating VS Capacitance

