

DIELECTRIC LABS High Q RF Microwave Capacitors



This product is RoHS compliant.



DLI is a specialist in tight tolerance, specialty high Q and high RF power Multi-Layer Capacitors (MLC). Our family of MLCs includes five highly stable ceramic material systems, an extensive combination of standard and non-magnetic finishes, leading and custom arrays, RoHS compliant terminations, and highly reliable lead-bearing platings. DLIs MLCs are used around the world in a host of ground-based and space-based critical communications systems where high reliability and high Q are absolute requirements.

Features:

- High Q
- Stable TC
- Low ESR
- High Self Resonance
- Low noise
- SMD Compatibility

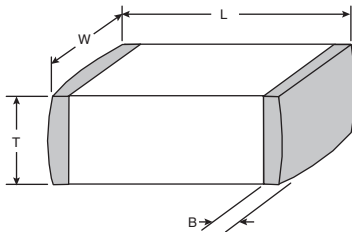
Specifications:

- Operating Range: -55°C to + 125°C
- Dielectric Material: Ultradurable Porcelain
- Dielectric Withstanding Voltage: 250% of WVDC for 5 seconds
- Insulation Resistance (MQ Min): +25°C: 10⁶
+125°C: 10⁵

Applications:

- DC Blocking
- Impedance Matching
- Bypass/ Coupling
- Tuning & Feedback
- Amplifier Matching Networks
- High RF Power Circuits
- VCO Frequency Stabilization

Ceramic Caps, SMD Dielectric Laboratories



DIMENSIONS: in. (mm)

Size	L	W	T	B
C04	0.040±.004 (1.02±0.1)	0.020±.004 (.51±0.1)	0.024 (0.61)	0.008±0.004 (0.2±0.01)
C11	0.055±0.015 (1.40±0.381-0.254)	0.055±0.15 (1.40±0.381)	0.050 (1.27)	0.005-0.020 (0.130-0.050)
C06	0.063±0.009 (1.6±0.23)	0.031±0.008 (0.80±0.20)	0.031 (0.80)	0.010±0.010-0.005 (0.254±0.254-0.127)
C08	0.080±0.012 (2.0±0.30)	0.050±0.008 (1.27±0.20)	0.051 (1.3)	0.005-0.03 (0.13-0.75)
C17/18	0.110±0.020-0.010 (2.79±0.51-0.25)	0.110±0.015 (2.79±0.381)	0.100 (2.54)	0.015±0.10 (0.381±0.254)

C06 CAPACITORS - 0603 CASE SIZE

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Dielectric Lab. Part No.	Value (pF)	Volt.	Tol. (±)	Price Each		
					1	10	100
766-C06CF0R3B9ZNX1T	C06CF0R3B-9ZN-X1T	0.3	250	0.10pF	5.17	4.52	3.56
766-C06CF0R9B9ZNX1T	C06CF0R9B-9ZN-X1T	0.9	250	0.10pF	3.02	2.65	2.08
766-C06CF1R0B9ZNX1T	C06CF1R0B-9ZN-X1T	1	250	0.10pF	3.02	2.65	2.08
766-C06CF1R2B9ZNX1T	C06CF1R2B-9ZN-X1T	1.2	250	0.10pF	3.02	2.65	2.08
766-C06CF1R5B9ZNX1T	C06CF1R5B-9ZN-X1T	1.5	250	0.10pF	3.02	2.65	2.08
766-C06CF2R0B9ZNX1T	C06CF2R0B-9ZN-X1T	2	250	0.10pF	3.02	2.65	2.08
766-C06CF2R7B9ZNX1T	C06CF2R7B-9ZN-X1T	2.7	250	0.10pF	3.02	2.65	2.08
766-C06CF3R3B9ZNX1T	C06CF3R3B-9ZN-X1T	3.3	250	0.10pF	2.30	2.02	1.58
766-C06CF3R9B9ZNX1T	C06CF3R9B-9ZN-X1T	3.9	250	0.10pF	3.03	2.65	2.08
766-C06CF4R7B9ZNX1T	C06CF4R7B-9ZN-X1T	4.7	250	0.10pF	3.22	2.82	2.21
766-C06CF5R6B9ZNX1T	C06CF5R6B-9ZN-X1T	5.6	250	0.10pF	3.22	2.82	2.21
766-C06CF6R8B9ZNX1T	C06CF6R8B-9ZN-X1T	6.8	250	0.10pF	3.22	2.82	2.21
766-C06CF9R1B9ZNX1T	C06CF9R1B-9ZN-X1T	9.1	250	0.10pF	3.22	2.82	2.21
766-C06CF120J9ZNX1T	C06CF120J-9ZN-X1T	12	250	5%	2.30	2.01	1.58
766-C06CF300J9ZNX1T	C06CF300J-9ZN-X1T	30	250	5%	3.02	2.64	2.08
766-C06CF330J9ZNX1T	C06CF330J-9ZN-X1T	33	250	5%	2.30	2.01	1.58

C11 CAPACITORS - 0505 CASE SIZE

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Dielectric Lab. Part No.	Value (pF)	Volt.	Tol. (±)	Price Each		
					1	10	100
766-C11CF0R2B9ZNX1T	C11CF0R2B-9ZN-X1T	0.2	250	0.10pF	3.78	3.30	2.60
766-C11CF0R3B9ZNX1T	C11CF0R3B-9ZN-X1T	0.3	250	0.10pF	3.78	3.30	2.60
766-C11CF0R4B9ZNX1T	C11CF0R4B-9ZN-X1T	0.4	250	0.10pF	3.78	3.30	2.60
766-C11CF0R5B9ZNX1T	C11CF0R5B-9ZN-X1T	0.5	250	0.10pF	3.78	3.30	2.60
766-C11CF0R7B9ZNX1T	C11CF0R7B-9ZN-X1T	0.7	250	0.10pF	3.78	3.30	2.60
766-C11CF0R9B9ZNX1T	C11CF0R9B-9ZN-X1T	0.9	250	0.10pF	2.46	2.15	1.69
766-C11CF1R0B9ZNX1T	C11CF1R0B-9ZN-X1T	1	250	0.10pF	2.46	2.15	1.69
766-C11CF1R2B9ZNX1T	C11CF1R2B-9ZN-X1T	1.2	250	0.10pF	2.46	2.15	1.69
766-C11CF1R5B9ZNX1T	C11CF1R5B-9ZN-X1T	1.5	250	0.10pF	2.46	2.15	1.69
766-C11CF2R0B9ZNX1T	C11CF2R0B-9ZN-X1T	2	250	0.10pF	2.46	2.15	1.69
766-C11CF2R2B9ZNX1T	C11CF2R2B-9ZN-X1T	2.2	250	0.10pF	2.46	2.15	1.69
766-C11CF2R7B9ZNX1T	C11CF2R7B-9ZN-X1T	2.7	250	0.10pF	2.46	2.15	1.69
766-C11CF3R3B9ZNX1T	C11CF3R3B-9ZN-X1T	3.3	250	0.10pF	2.46	2.15	1.69
766-C11CF3R9B9ZNX1T	C11CF3R9B-9ZN-X1T	3.9	250	0.10pF	2.58	2.26	1.77
766-C11CF4R7B9ZNX1T	C11CF4R7B-9ZN-X1T	4.7	250	0.10pF	3.38	2.96	2.32
766-C11CF5R6B9ZNX1T	C11CF5R6B-9ZN-X1T	5.6	250	0.10pF	2.58	2.26	1.77
766-C11CF6R8B9ZNX1T	C11CF6R8B-9ZN-X1T	6.8	250	0.10pF	2.58	2.26	1.77
766-C11CF8R2B9ZNX1T	C11CF8R2B-9ZN-X1T	8.2	250	0.10pF	2.58	2.26	1.77
766-C11CF9R1B9ZNX1T	C11CF9R1B-9ZN-X1T	9.1	250	0.10pF	2.58	2.26	1.77
766-C11CF100J9ZNX1T	C11CF100J-9ZN-X1T	10	250	5%	2.10	1.84	1.44
766-C11CF110J9ZNX1T	C11CF110J-9ZN-X1T	11	250	5%	2.10	1.84	1.44
766-C11CF270J9ZNX1T	C11CF270J-9ZN-X1T	27	250	5%	2.18	1.91	1.50
766-C11CF330J9ZNX1T	C11CF330J-9ZN-X1T	33	200	5%	2.18	1.91	1.50

C04, C06, & C08 BROADBAND BLOCKS - 0402, 0603, 0805 CASE SIZES

See table for dimensions.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Dielectric Lab. Part No.	Value (pF)	Volt.	Frequency Range	Price Each		
					1	10	100
766-C04BL121X5SNX0T	C04BL121X-5SN-X0T	120	50	5MHz-30GHz	3.06	2.68	2.11
766-C06BL851X5UNX0T	C06BL851X-5UN-X0T	850	50	2MHz-30GHz	3.26	2.85	2.24
766-C06BL851X5ZNX0T	C06BL851X-5ZN-X0T	850	50	2MHz-30GHz	2.88	2.77	2.20
766-C08BL242X5SNX0T	C08BL242X-5SN-X0T	2400	50	1MHz-20GHz	3.34	2.92	2.29
766-C08BL242X5ZNX0T	C08BL242X-5ZN-X0T	2400	50	1MHz-20GHz	2.96	2.58	2.05

C17 CAPACITORS - 1111 CASE SIZE

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Dielectric Lab. Part No.	Value (pF)	Volt.	Tol. (±)	Price Each		
					1	10	100
766-C17CF3R3B7ZNX1T	C17CF3R3B-7ZN-X1T	3.3	1000	0.10pF	4.81	4.21	3.31
766-C17CF6R8B7ZNX1T	C17CF6R8B-7ZN-X1T	6.8	1000	0.10pF	4.81	4.21	3.31
766-C17CF110J7ZNX1T	C17CF110J-7ZN-X1T	11	1000	5%	3.74	3.27	2.57
766-C17CF120J7ZNX1T	C17CF120J-7ZN-X1T	12	1000	5%	3.74	3.27	2.57
766-C17CF270J7ZNX1T	C17CF270J-7ZN-X1T	27	1000	5%	4.09	3.58	2.81
766-C17CF300J7ZNX1T	C17CF300J-7ZN-X1T	30	1000	5%	4.09	3.58	2.81
766-C17CF330J7ZNX1T	C17CF330J-7ZN-X1T	33	1000	5%	4.09	3.58	2.81

C18 CAPACITORS - 1111 CASE SIZE EXTENDED VOLTAGE RANGE

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Dielectric Lab. Part No.	Value (pF)	Volt.	Tol. (±)	Price Each		
					1	10	100
766-C18CF0R5B-GZN-X1T	C18CF0R5B-GZN-X1T	0.5	2000	0.1pF	5.48	4.75	3.80
766-C18CF1R2B-GZN-X1T	C18CF1R2B-GZN-X1T	1.2	2000	0.1pF	4.58	3.97	3.17
766-C18CF2R2B-GZN-X1T	C18CF2R2B-GZN-X1T	2.2	2000	0.1pF	4.80	4.16	3.33
766-C18CF3R3B-GZN-X1T	C18CF3R3B-GZN-X1T	3.3	2000	0.1pF	4.80	4.22	3.33
766-C18CF3R9B-GZN-X1T	C18CF3R9B-GZN-X1T	3.9	2000	0.1pF	4.80	4.22	3.33
766-C18CF130J-GZN-X1T	C18CF130J-GZN-X1T	12	2000	5%	4.08	3.60	2.82
766-C18CF160J-GZN-X1T	C18CF160J-GZN-X1T	16	2000	5%	4.08	3.60	2.82
766-C18CF180J-GZN-X1T	C18CF180J-GZN-X1T	18	2000	5%	4.08	3.60	2.82
766-C18CF390J-GZN-X1T	C18CF390J-GZN-X1T	39	2000	5%	4.09	3.60	2.83
766-C18CF470J-GZN-X1T	C18CF470J-GZN-X1T	47	2000	5%	4.58	3.97	3.17
766-C18CF510J-GZN-X1T	C18CF510J-GZN-X1T	51	2000	5%	4.58	3.97	3.17
766-C18CF680J-GZN-X1T	C18CF680J-GZN-X1T	68	2000	5%	4.58	3.97	3.17
766-C18CF560J-GZN-X1T	C18CF560J-GZN-X1T	561	2000	5%	4.58	3.97	3.17