

# Extended Range Surface Mount MLCC with DLA Approvals



These additional ranges of surface mount multilayer ceramic capacitors provide additional capability in 0603 and 0402 case sizes. DLA 03028 covers 0603 case size BP and BR dielectric and DLA 03029 is for 0402 case size in BP and BR dielectric.

For RF surface mount capacitor versions DLA 06019 covers 0605 case size for BP and BG dielectric. DLA 06022 is for 1210 case size and BP and BG dielectric devices.

DLA 05002 covers RF capacitors in 0603 case size, COG dielectric.

## DLA 03028 0603 Case Size

Type	Dielectric	Capacitance pF	Tolerance	Voltage WVDC
DLA 03028	BP	0.5 - 9.1	C,D	6.3/10/16/25/50/100
DLA 03028	BP	10 - 330	F,G,J	6.3/10/16/25/50/100
DLA 03028	BP	390 - 1,000	F,G,J	6.3/10/16/25/50
DLA 03028	BP	1,200 - 1,500	F,G,J	6.3/10/16/25
DLA 03028	BR	100 - 1,000	K,M	6.3/10/16/25/50/100/200
DLA 03028	BR	1,200 - 12,000	K,M	6.3/10/16/25/50/100
DLA 03028	BR	15,000 - 39,000	K,M	6.3/10/16/25/50
DLA 03028	BR	47,000	K,M	6.3/10/16/25
DLA 03028	BR	56,000 - 100,000	K,M	6.3/10/16
DLA 03028	BR	120,000 - 220,000	K,M	6.3/10

## DLA 03029 0402 Case Size

Type	Dielectric	Capacitance pF	Tolerance	Voltage WVDC
DLA 03029	BP	0.5 - 9.1	C,D	6.3/10/16/25/50
DLA 03029	BP	10 - 220	F,G,J	6.3/10/16/25/50
DLA 03029	BP	270 - 330	F,G,J	6.3/10/16
DLA 03029	BR	100 - 3,300	K,M	6.3/10/16/25/50
DLA 03029	BR	3,900 - 4,700	K,M	6.3/10/16/25

## DLA 06019 RF Capacitor 0605 Case Size

Type	Dielectric	Capacitance pF	Tolerance	Voltage WVDC
DLA 06019	BP,BG	0.1 - 0.2	B	50/150
DLA 06019	BP,BG	0.3 - 0.4	B,C	50/150
DLA 06019	BP,BG	0.5 - 6.2	B,C,D	50/150
DLA 06019	BP,BG	6.8 - 9.1	B,C,J,K,M	50/150
DLA 06019	BP,BG	10 - 100	F,G,J,K,M	50/150
DLA 06019	BP,BG	110 - 1,000	F,G,J,K,M	50

## DLA 06022 RF Capacitor 1210 Case Size

Type	Dielectric	Capacitance pF	Tolerance	Voltage WVDC
DLA 06022	BP,BG	0.1 - 0.2	B	200/500
DLA 06022	BP,BG	0.3 - 0.4	B,C	200/500
DLA 06022	BP,BG	0.5 - 6.2	B,C,D	200/500
DLA 06022	BP,BG	6.8 - 9.1	B,C,J,K,M	200/500
DLA 06022	BP,BG	10 - 100	F,G,J,K,M	200/500
DLA 06022	BP,BG	110 - 200	F,G,J,K,M	200/300
DLA 06022	BP,BG	220 - 470	F,G,J,K,M	200
DLA 06022	BP,BG	510 - 620	F,G,J,K,M	100
DLA 06022	BP,BG	680 - 1,000	F,G,J,K,M	50
DLA 06022	BP	1,100 - 5,100	F,G,J,K,M	50

## DLA 05002 0603 Case Size

Type	Dielectric	Capacitance pF	Tolerance	Voltage WVDC
DLA 05002	COG	0.1 - 0.2	A,B	50/100/200/250
DLA 05002	COG	0.3 - 1	A,B,C	50/100/200/250
DLA 05002	COG	1.1 - 6.2	A,B,C,D	50/100/200/250
DLA 05002	COG	6.8 - 100	B,C,J,K,M	50/100/200/250

## HOW TO ORDER

### 03028

**Case Size**  
03028 (0603)  
03029 (0402)  
05002 (0603)  
05006 (0805)  
05007 (1206)  
06022 (1210)  
06019 (0605)

### BX

**Voltage Temperature Limits**  
BP = 0 ± 30 ppm/°C without voltage;  
0 ± 30 ppm/°C with rated voltage from -55°C to +125°C  
BR = ±15% without voltage;  
+15 -40% with rated voltage from -55°C to +125°C  
BX = ±15% without voltage;  
+15 -25% with rated voltage from -55°C to +125°C

### 102

**Capacitance**  
EIA Capacitance Code in pF  
First two digits = significant figures or "R" for decimal place  
Third digit = number of zeros or after "R" significant figures.

### B

**Rated Voltage**  
W = 6.3V  
X = 10V  
Y = 16V  
Z = 25V  
A = 50V  
B = 100V  
C = 200V

### J

**Capacitance Tolerance**  
B = ±.1 pF  
C = ±.25 pF  
D = ±.5 pF  
F = ±1%  
G = ±2%  
J = ±5%  
K = ±10%  
M = ±20%

### U

**Termination Finish**  
M = Palladium Silver  
U = Solder Coated (4% Lead min) Melting Point of 200°C  
Z = Tin/Lead Alloy with 4% Lead

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**Options**  
C = Full Group G  
L = 2000 Hour Life  
M = 1000 Hour Life  
H = Low Voltage Humidity

**Not RoHS Compliant**

# Extended Range Surface Mount MLCC with DLA Approvals



These extended range surface mount, multilayer ceramic capacitors provide options for lower voltages and higher capacitance versions to DLA drawings. Dielectric options are BP, BR and BX. DLA 05006 covers 0805 case size and DLA 05007 provides the 1206 case size capability.

## DLA 05006 0805 Case Size

Type	Dielectric	Capacitance pF	Tolerance	Voltage WVDC
DLA 05006	BP	0.5	C,D	16/25/50/100/200
DLA 05006	BP	1 - 8.2	C,D	16/25/50/200
DLA 05006	BP	10 - 470	F,G,J	16/25/50/200
DLA 05006	BP	560 - 680	F,G,J	16/25/100/200
DLA 05006	BP	820 - 1,000	F,G,J	16/25/50/100
DLA 05006	BP	1,200 - 3,900	F,G,J	16/25/50
DLA 05006	BP	4,700 - 5,600	F,G,J	16/25
DLA 05006	BP	6,800 - 8,200	F,G,J	16
DLA 05006	BR	330 - 22,000	K,M	10/16/25/50/100/200
DLA 05006	BR	33,000 - 47,000	K,M	10/16/25/50/100
DLA 05006	BR	68,000 - 100,000	K,M	10/16/25/50/100
DLA 05006	BR	150,000	K,M	10/16/25/50
DLA 05006	BR	220,000	K,M	10/16/25
DLA 05006	BR	330,000 - 470,000	K,M	10/16
DLA 05006	BR	680,000 - 1µF	K,M	10

## DLA 05007 1206 Case Size

Type	Dielectric	Capacitance pF	Tolerance	Voltage WVDC
DLA 05007	BP	0.5 - 8.2	C,D	16/25/50/100/200
DLA 05007	BP	10 - 680	F,G,J	16/25/50/100/200
DLA 05007	BP	820 - 1,000	F,G,J	16/25/50/100
DLA 05007	BP	1,200 - 3,900	F,G,J	16/25/50
DLA 05007	BP	4,700 - 5,600	F,G,J	16/25
DLA 05007	BP	6,800 - 8,200	F,G,J	16
DLA 05007	BR	1,500 - 6,800	K,M	10/16/25/50/100/200
DLA 05007	BR	10,000	K,M	10/16/25/50/100
DLA 05007	BR	15,000 - 33,000	K,M	10/16/25/50
DLA 05007	BR	47,000	K,M	10/16/25
DLA 05007	BR	68,000	K,M	10/16
DLA 05007	BR	100,000	K,M	10/16/25
DLA 05007	BR	150,000 - 220,000	K,M	10

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