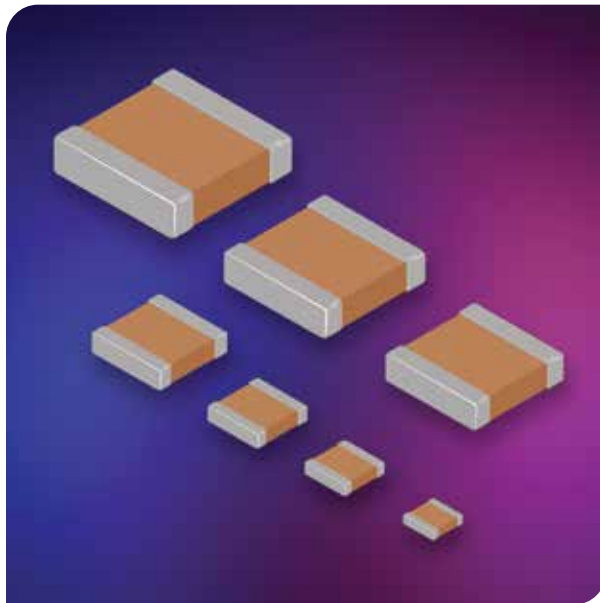




Capacitors

Large Size MLC Capacitors 500 - 5,000 VDC



Features:

- Rated Working Voltages from 50 to 5,000 VDC
- Low ESR Ceramic Out-performs Tantalums
- Compact MLC Designs Smaller Than Film or Disc
- MIL-PRF-55681 & Hi-Rel Screened Versions Available
- Custom Sizes, Voltages, and Values Available

Common Applications:

- Power Supplies
- Voltage Multipliers
- Data Isolation
- Surge Protection
- Industrial Control Circuits
- Custom Applications

Electrical Characteristics

Meets standard NPO & X7R dielectric specifications except:

Dielectric Withstanding Voltage (DWV)

DWV = 750 VDC for 500 WVDC rated units,

DWV = 945 VDC for 630 WVDC rated units,

DWV = 1.2 X rated WVDC for ratings units, > 1,000 WVDC

NOTE: Circuit applications above 1KVDC may require surface coating to prevent external arcing.

Type	NPO	X7R
Operating Range:	-55 to +125°C	-55 to +125°C
Temperature Coefficient:	0±30ppm/°C (-55to+125°C)	0±15% (-55to+125°C)
200°C Cap. Drop:	-0.5% max.	-45% max.
Dissipation Factor:	0.001 (0.1%) max.	0.020 (2.0%) max.
Aging Rate:	None	<1.0% per decade
Insulation Resistance:	25°C IR >100GΩ or 1000ΩF (whichever 200°C IR >1ΩF or 100MΩ is less)	
Withstanding Voltage:	2.5 X WVDC for ratings ≤ 200 VDC 1.5 X WVDC for ratings 201-500 VDC	
Test Conditions:	C > 100 pF; 1kHz ±50Hz; 1.0±0.2 VRMS C ≤ 100 pF; 1Mhz ±50kHz; 1.0±0.2 VRMS	

HOW TO ORDER

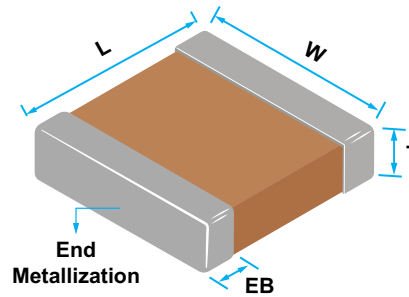
VP	EH	501	W	473	K	1	GV	001	E
Subfamily	Size	Voltage	DTC	Capacitance	Tol	Mark	Termination	Special Code	Pack
VP = High Volt PME SMD ≥ 500V	See chart	501 = 500 V 102 = 10 V 160 = 16 V 250 = 25 V 500 = 50 V 101 = 100 V	G = NP0/COG W = X7R	1st two digits are significant; 3rd digit denotes number of zeros. 105 = 1.00 μF 476 = 47.0 μF 107 = 100 μ	K = ±10% M = ±20%	1 = No Mark 3 = Cap Code & Tol Z = Special Code	GV = Ni/Sn (RoHS) NT = Ni/SnPb *avail on selected parts	001 = Default catalog item	E = 7" Reel Emb Tape T = 7" Reel Paper Tape

Example: VPEH501W473K1GV001E Capacitors High Voltage PME SMD ≥ 500V, 2225, X7R, 500.0V, 0.047μF±10%, Ni/Sn (RoHS), 7" Reel Embossed Tape










Capacitors

Large Size MLC Capacitors 500 - 5,000 VDC



Maximum Capacitance vs DC Voltage Rating

Size / Code / Legacy	Inches	(mm)		500 V	1 kV	2 kV	3 kV	4 kV	5 kV	
1825 / DV / S49 	L	.180 ±.010	(4.57 ±.25)	NPO	183	123	562	222	122	391
	W	.250 ±.010	(6.35 ±.25)							
	T	.140 Max.	(3.56 Max)	X7R	334	393	153	822	202	821
	E/B	.025 ±.015	(0.64±.38)							
2220 / EF / S47 	L	.225 ±.015	(5.72 ±.38)	NPO	183	153	562	272	152	471
	W	.200 ±.015	(5.08 ±.38)							
	T	.150 Max.	(3.81 Max)	X7R	334	563	273	103	222	152
	E/B	.025 ±.015	(0.64±.38)							
2225 / EH / S48 	L	.225 ±.010	(5.72 ±.25)	NPO	273	183	822	332	182	681
	W	.255 ±.015	(6.48 ±.38)							
	T	.160 Max.	(4.06 Max)	X7R	474	683	393	153	562	152
	E/B	.025 ±.015	(0.64±.38)							
1515 / DM / H42 	L	.150 ± .015	(3.81 ± .38)	NPO	472	152	681	471	271	101
	W	.150 ± .015	(3.81 ± .38)							
	T	.150 Max	(3.81 Max)	X7R	683	223	103	222	102	331
	E/B	.025 ± .015	(0.64 ± .38)							
2520 / ER / H47 	L	.250 ± .018	(6.35 ± .46)	NPO	123	332	152	102	561	221
	W	.200 ± .015	(5.08 ± .38)							
	T	.150 Max	(3.81 Max)	X7R	224	473	223	472	222	681
	E/B	.025 ± .015	(0.64 ± .38)							
3530 / FH / H51 	L	.350 ± .035	(8.89 ± .89)	NPO	333	682	332	222	122	471
	W	.300 ± .030	(7.62 ± .76)							
	T	.200 Max	(5.08 Max)	X7R	564	104	473	103	472	152
	E/B	.025 ± .015	(0.64 ± .38)							
3640 / FK / H54 	L	.360 ± .030	(9.14 ± .76)	NPO	393	822	332	222	152	681
	W	.400 ± .030	(10.16 ± .76)							
	T	.200 Max	(5.08 Max)	X7R	824	224	563	473	153	822
	E/B	.025 ± .015	(0.64 ± .38)							

*Available capacitance values include the following significant retma values and their multiples: 1.0 1.2 1.5 1.8 2.2 2.7 3.3 3.9 4.7 5.6 6.8 8.2 (1.0 = 1.0, 10, 100, 1000, etc.) Consult factory for sizes, values, & voltages not shown.