



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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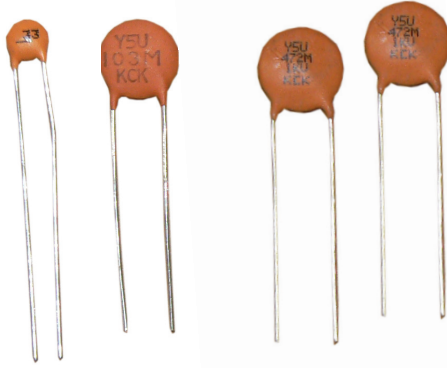
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Types GE, GH, GM, GP Disc Ceramic Capacitors

General Purpose Capacitors



Type G general purpose disc ceramic capacitors are an ideal choice for low cost, small size and low to high DC voltage, general purpose, coupling, by-pass and filtering applications.

Highlights

- Small size
- Conformally coated
- Radial leads
- General purpose
- Long leads



Specifications

Capacitance Range:	5 pF to 22,000 pF
Voltage Range:	50, 100, 500, 1,000 Vdc
Tolerance:	See ratings tables
Operating Temperature Range:	-30 °C to +85 °C
Insulation Resistance:	10,000 MΩ minimum
Dissipation Factor:	2.5% max. @ 1 kHz; Y5U: 4% @ 1kHz
Breakdown Voltage:	2.5 x rated voltage for 5 seconds maximum
Lead Length:	1.0 inch minimum

Complies with the EU Directive 2002/95/EC requirement restricting the use of Lead (Pb), Mercury (Hg), Cadmium (Cd), Hexavalent chromium (Cr(VI)), PolyBrominated Biphenyls (PBB) and PolyBrominated Diphenyl Ethers (PBDE).

Ratings

Cap (pF)	Catalog Part Number	Tol. (±)	Temp. Coef.	Size (Inches)				Size (Millimeters)			
D	T	S	d	D	T	S	d	D	T	S	d
50 Vdc											
5	GE050C *	.25pF	SL	.157	.118	.098	.016	4.0	3.0	2.5	.4
10	GE100D **	.5pF	SL	.157	.118	.098	.016	4.0	3.0	2.5	.4
20	GE200K **	10%	SL	.157	.118	.098	.016	4.0	3.0	2.5	.4
27	GE270K *	10%	SL	.157	.118	.098	.016	4.0	3.0	2.5	.4
33	GE330K	10%	SL	.157	.118	.098	.016	4.0	3.0	2.5	.4
68	GE680K *	10%	SL	.157	.118	.098	.016	4.0	3.0	2.5	.4
100	GE101K	10%	Y5P	.157	.118	.098	.016	4.0	3.0	2.5	.4
330	GE331K *	10%	Y5P	.157	.118	.098	.016	4.0	3.0	2.5	.4
470	GE471K *	10%	Y5P	.157	.118	.098	.016	4.0	3.0	2.5	.4
1,000	GE102K	10%	Y5P	.197	.118	.098	.016	5.0	3.0	2.5	.4
1,000	GE102M *	20%	Y5T	.157	.118	.098	.016	4.0	3.0	2.5	.4
1,500	GE152K **	10%	Y5P	.197	.118	.098	.016	5.0	3.0	2.5	.4
10,000	GE103K *	10%	Y5P	.472	.118	.197	.020	12.0	3.0	5.0	.5
100 Vdc											
2,200	GH222M *	20%	Y5U	.236	.118	.252	.025	6.0	3.0	6.4	.6
500 Vdc											
15	GM150K *	10%	SL	.236	.157	.252	.025	6.0	4.0	6.4	.6
100	GM101K	10%	Y5P	.236	.157	.252	.025	6.0	4.0	6.4	.6
330	GM331K *	10%	Y5P	.236	.157	.252	.025	6.0	4.0	6.4	.6
470	GM471K *	10%	Y5P	.236	.157	.252	.025	6.0	4.0	6.4	.6
680	GM681K **	10%	Y5P	.236	.157	.252	.025	6.0	4.0	6.4	.6
1,000	GM102K *	10%	Y5P	.236	.157	.252	.025	6.0	4.0	6.4	.6
1,000	GM102M *	20%	Y5U	.236	.157	.252	.025	6.0	4.0	6.4	.6
1,000	GM102Z **	-20+80	Y5U	.236	.157	.252	.025	6.0	4.0	6.4	.6
2,200	GM222K *	10%	Y5P	.339	.157	.250	.025	8.6	4.0	6.4	.6
3,300	GM332M **	20%	Y5U	.291	.157	.252	.025	7.4	4.0	6.4	.6
4,700	GM472K *	10%	Y5P	.492	.157	.252	.025	12.5	4.0	6.4	.6
4,700	GM472M *	20%	Y5U	.339	.157	.252	.025	8.6	4.0	6.4	.6
10,000	GM103K	10%	Y5P	.642	.157	.374	.025	16.3	4.0	9.5	.6
10,000	GM103M *	20%	Y5U	.492	.157	.252	.025	12.5	4.0	6.4	.6
10,000	GM103Z *	-20+80	Y5U	.492	.157	.252	.025	12.5	4.0	6.4	.6
22,000	GM223Z *	-20+80	Y5U	.642	.157	.374	.025	16.3	4.0	9.5	.6

* Available only until stock is depleted

** Part number obsolete

Types GE, GH, GM, GP Disc Ceramic Capacitors

Ratings

RoHS Compliant

Cap	Catalog	Tol.	Temp.	Size				Size			
Part Number	Part Number	Coef.	Coef.	D	T	S	d	D	T	S	d
(pF)	(pF)	(±)		(Inches)				(Millimeters)			
1000 Vdc											
27	GP427 *	10%	SL	.236	.177	.252	.025	6.0	4.5	6.4	.6
30	GP430 **	10%	SL	.236	.177	.252	.025	6.0	4.5	6.4	.6
47	GP447	10%	SL	.236	.177	.252	.025	6.0	4.5	6.4	.6
100	GP310	10%	Y5P	.236	.177	.252	.025	6.0	4.5	6.4	.6
220	GP322**	10%	Y5P	.236	.177	.252	.025	6.0	4.5	6.4	.6
270	GP327 *	10%	Y5P	.236	.177	.252	.025	6.0	4.5	6.4	.6
330	GP333 **	10%	Y5P	.236	.177	.252	.025	6.0	4.5	6.4	.6

Cap	Catalog	Tol.	Temp.	Size				Size			
Part Number	Part Number	Coef.	Coef.	D	T	S	d	D	T	S	d
(pF)	(pF)	(±)		(Inches)				(Millimeters)			
1000 Vdc											
470	GP347 **	10%	Y5P	.236	.177	.252	.025	6.0	4.5	6.4	.6
560	GP356 *	10%	Y5P	.236	.177	.252	.025	6.0	4.5	6.4	.6
680	GP368 *	10%	Y5P	.236	.177	.252	.025	6.0	4.5	6.4	.6
1,000	GP210	10%	Y5P	.291	.177	.252	.025	7.4	4.5	6.4	.6
2,200	GP222	10%	Y5P	.374	.177	.252	.025	9.5	4.5	6.4	.6
4,700	GP247*	20%	Y5U	.433	.177	.252	.025	11.0	4.5	6.4	.6
22,000	GP122 **	20%	Y5U	.748	.177	.374	.025	19.0	4.5	9.5	.6

* Available only until stock is depleted

** Part number obsolete

EIA TEMPERATURE COEFFICIENT CODES

A combination of characters designating capacitance drift over a temperature range.
Example: Y5E could change $\pm 4.7\%$ over a temperature range of -30°C to $+85^{\circ}\text{C}$.

Letter Symbol	Low Temp Requirement	Number Symbol	High Temp Requirement	Letter Symbol	Maximum Capacitance Change Over Temp Rating
X	-55°C	2	$+45^{\circ}\text{C}$	A	$\pm 1.0\%$
Y	-30°C	4	$+65^{\circ}\text{C}$	B	$\pm 1.5\%$
Z	$+10^{\circ}\text{C}$	5	$+85^{\circ}\text{C}$	C	$\pm 2.2\%$
		6	$+105^{\circ}\text{C}$	D	$\pm 3.3\%$
		7	$+125^{\circ}\text{C}$	E	$\pm 4.7\%$
				F	$\pm 7.5\%$
				P	$\pm 10.0\%$
				R	$\pm 15.0\%$
				S	$\pm 22.0\%$
				T	$+22\%, -33\%$
				U	$+22\%, -56\%$
				V	$+22\%, -82\%$

TEMPERATURE COEFFICIENT CODES

Temperature Range -55°C to $+125^{\circ}\text{C}$		% Change Per 1°C
NPO-(COG)	$\pm 30\text{ppm}$	$\pm 0.030\%$
N330	-330ppm	-0.033%
N470	-470ppm	-0.047%
N750	-750ppm	-0.075%
N1000	-1000ppm	-0.10%
N1500	-1500ppm	-0.15%
N2200	-2200ppm	-0.22%
N3300	-3300ppm	-0.33%
N4700	-4700ppm	-0.47%
N5600	-5600ppm	-0.56%
SL	$-750, +100\text{ppm}$	$\pm 0.075\%$ Max

Physical Specifications

Case: Conformal Coating

Lead material: Tinned copper wire. (Minimum lead content: 5%)

Tape and Reel Available upon Request

Leads are formed to .200 (5.0mm) lead spacing

For D less than .315 (8.0mm) - Quantity/Reel = 2500 pcs

For D .315 (8.0mm) to .472 (12.0mm) - Quantity/Reel = 2000 pcs

Tape and Reel not available for D greater than .472 (12mm)

